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MINI-MAC
EDIT 2

Jeux

GASTON
OPERATION OMEGA

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EDIT 2

Bernard BESSE

Lorsqu'un programme BASIC en cours de développement atteint une certaine dimension, les possibilités de l'éditeur intégré deviennent insuffisantes et le besoin d'un éditeur de texte commence à se faire sentir.



Mais ce que l'on gagne en puissance avec un éditeur séparé, on le perd en souplesse car, même pour des opérations limitées, il faut :
— sauvegarder en ASCII (s'il ne l'est déjà) le programme à "éditer",
— charger l'éditeur,
— charger le programme à éditer.

Et à la fin du travail :
— sauvegarder le programme édité,
— charger le programme édité.

Contrairement aux éditeurs séparés, l'éditeur intégré opère en "temps réel" puisque, sitôt une modification effectuée, il est possible d'exécuter le programme, sans avoir à charger ou sauvegarder quoi que ce soit.
Le programme EDIT2 a pour but d'ajouter aux possibilités de l'éditeur intégré les fonctions temps réel suivantes :
— trouver toutes les occurrences d'un NOM de variable,
— trouver toutes les occurrences d'un NUMERO de ligne.

Ces fonctions permettent notamment :
— de créer un nom de variable en toute connaissance de cause,
— de vérifier si les noms des variables figurant dans une routine à MERGEr risquent d'interférer avec ceux déjà présents dans le programme,
— de changer d'une façon sûre le nom d'une variable,
— de s'assurer qu'une ligne n'est pas référencée avant de la supprimer.

MISE EN OEUVRE

EDIT2 est stocké en format ASCII à partir de 60000.

Après chargement du programme en cours de développement :
— créer une ligne 1 GOTO 60000
— faire MERGE "edit2

Faire RUN (ou RUN 60000 s'il n'y a pas la ligne 1 déjà citée), puis :
— choisir la sortie sur imprimante ou sur écran,
— entrer un nom de VARIABLE ou un NUMERO de ligne (pour revenir à la question précédente "Imprimante ou Ecran", faire seulement ENTER).
La variable peut être écrite en majuscules ou en minuscules (ou un mélange des deux).
On ajoute les suffixes %, !, $ s'il y a lieu et, si la variable est indicée, une parenthèse gauche.
Exemple : blduLE$ [sans espaces]

Renumérotation du programme édité :
— on peut, au cours du traitement, faire RENUM sans être obligé de rétablir la numérotation d'EDIT2 à partir de 60000
D'où l'intérêt de la ligne initiale 1 GOTO 60000

EDIT2 s'arrête par BREAK.

POINTS PARTICULIERS

La recherche se fait principalement par INSTR et non par PEEK (c'est beaucoup plus rapide).
Le procédé utilisé est celui de la chaîne forcée, on force dans les 3 octets du descripteur d'une variable ZZ$ (descripteur créé en faisant ZZ$ = "") :
— la longueur de la ligne,
— l'adresse de la ligne (2 octets).

Le numéro d'une ligne référencée peut exister sous deux formes :
— le numéro lui-même en binaire sur 2 octets,
— l'adresse de la ligne en binaire sur 2 octets.
La routine ADRLINE a pour but de trouver rapidement l'adresse de la ligne dont on recherche les occurrences.

EDIT2 s'arrête, non pas sur le test NUMERO ligne > = 60000, mais sur le test ADRESSE ligne > = ADRESSE 1ère d'EDIT2, ce qui permet l'utilisation de RENUM.

A la fin d'une séance, si la mise au point n'est pas terminée, il est souvent souhaitable de SAUVEGARDER ensemble le PROGRAMME + EDIT2.
On est ainsi prêt à opérer dans les meilleurs délais à la séance suivante.

Pour traiter EDIT2 par EDIT2 :
— charger EDIT2,
— RENUM 62000,
— MERGE"EDIT2,
— créer ligne : 1 GOTO 62000,
— RUN.

L'attention de nos fidèles lecteurs est attirée sur les routines machine KDEEK et KDOKE (1er K pour déKalage) plus versatiles que DEEK et DOKE.

```
60000 :GOTO 60050:THEN 61130
*** Ne pas enlever cette 1ere Ligne ***
60010 p$="edit2":PRINT CHR$(7)CHR$(PEEK(
&A700)+65)" : "p$" Ascii":SAVE p$,a:END
60020 '------
60030 '(c) Bernard BESSE
60040 '------
60050 :
60060 CLEAR:ON BREAK GOSUB 61110:MODE 2:
DEFINT a-z:vr=-1:fa=0:zz$=""
60070 ' CALL @kdeek(1), Adresse de Base,
 Deplacement, @R1 (R1=Val. DEEK)
60080 DATA DD,6E,04,DD,66,05,DD,5E,02,DD
,56,03,19,5E,23,56
60090 DATA DD,6E,00,DD,66,01,73,23,72,C9
60100 RESTORE 60080:DIM kdeek(13):r1=0
60110 FOR k=1 TO 13:READ l$,m$:kdeek(k)=
VAL("&H"+m$+l$):NEXT k
60120 ' CALL @kdoke(1), Adresse de Base,
 Deplacement, Valeur a DOKER
60130 DATA DD,6E,04,DD,66,05,DD,5E,02,DD
,56,03,DD,4E,00,DD
60140 DATA 46,01,19,71,23,70,C9,00
60150 RESTORE 60130:DIM kdoke(12)
60160 FOR k=1 TO 12:READ l$,m$:kdoke(k)=
VAL("&H"+m$+l$):NEXT k
60170 ' CALL @adrline(1), NUM, @R1 (R1=
adr.de la ligne NUM)
60180 DATA DD,4E,02,DD,46,03,FD,21,6F,01
,FD,6E,03,FD,66,04
60190 DATA B7,ED,42,28,14,30,0E,FD,5E,01
,FD,56,02,7B,B2,28
60200 DATA 04,FD,19,18,E5,FD,21,00,00,FD
,E5,D1,DD,6E,00,DD
60210 DATA 66,01,73,23,72,C9
60220 RESTORE 60180:DIM adrline(27):r1=0
60230 FOR k=1 TO 27:READ l$,m$:adrline(k
)=VAL("&"+m$+l$):NEXT k
60240 RESTORE 60000:CALL@kdeek(1),&AE30,
0,@r1:adr60000=r1' adr lere ligne
60250 :
60260 CLS:PRINT"<I>mprimante ou <E>cran
? ";
60270 WHILE INKEY$<>"":WEND
60280 ie$=UPPER$(INKEY$):IF ie$=""THEN 6
0280
60290 IF ie$="E"THEN ca=0 ELSE IF ie$="I
"THEN ca=8 ELSE PRINT CHR$(7):GOTO 60250
60300 PRINT ie$
60310 :
60320 deb=368:num=fa:ref=0
60330 INPUT"Nom (VARIABLE) ou Numero (LI
GNE) ";name$:nm$=name$
60340 IF name$=""THEN 60250
60350 IF INSTR(name$," ")>0 THEN PRINT C
HR$(7);:GOTO 60310
60360 name$=UPPER$(name$):lv=LEN(name$):
pg=fa
60370 car.ok$=".ABCDEFGHIJKLMNOPQRSTUVWX
YZ1234567890"
60380 xx=INSTR(car.ok$,LEFT$(name$,1)):I
F xx<2 THEN PRINT CHR$(7);:GOTO 60310
60390 IF xx<28 THEN 60510
60400 IF VAL(name$)=0 OR VAL(name$)>6553
5 THEN PRINT CHR$(7);:GOTO 60310
60410 FOR k=2 TO lv
60420   IF INSTR(car.ok$,MID$(name$,k,1)
)<28 THEN PRINT CHR$(7);:GOTO 60310
60430 NEXT k
60440 zline!=VAL(name$):IF zline!>32767
THEN zline=zline!-65536 ELSE zline=zline
!
60450 lsb=PEEK(@zline):msb=PEEK(@zline+1
)
60460 look2$=CHR$(30)+CHR$(lsb)+CHR$(msb
)
60470 CALL@adrline(1),zline,@r1
60480 lsb=PEEK(@r1):msb=PEEK(@r1+1)
60490 look1$=CHR$(29)+CHR$(lsb)+CHR$(msb
)
60500 num=vr:GOTO 60680
60510 :
60520 IF RIGHT$(name$,1)="("THEN pg=vr:n
ame$=LEFT$(name$,lv-1):lv=lv-1
60530 IF RIGHT$(name$,1)="%"THEN type=2:
GOTO 60570
60540 IF RIGHT$(name$,1)="$"THEN type=3:
GOTO 60570
60550 IF RIGHT$(name$,1)="!"THEN type=4:
GOTO 60570
60560 type$="":GOTO 60590
60570 :
60580 type$=CHR$(type):name$=LEFT$(name$
,lv-1):lv=lv-1
60590 :
60600 IF lv=1 THEN 60640
60610 FOR k=2 TO lv
60620   IF INSTR(car.ok$,MID$(name$,k,1)
)=0 THEN PRINT CHR$(7);:GOTO 60310
60630 NEXT k
60640 :
60650 der$=RIGHT$(name$,1):name$=LEFT$(n
ame$,lv-1):lv=lv-1
60660 der=ASC(der$):maju=der+128:IF der>
=65 AND der<=90 THEN minu=maju+32 ELSE m
inu=maju
60670 look2$=type$+STRING$(2,0)
60680 :
60690 '--- Recherche et Affichage ---
60700 PRINT#ca,"LIGNES contenant VARIABL
E (ou LIGNE): ";nm$
60710 PRINT#ca,"------------------------
------------";
60720 lg=0
60730 :
60740 deb=deb+lg:CALL@kdeek(1),deb,0,@r1
:lg=r1:IF lg=0 THEN 61080
60750 CALL@kdeek(1),deb,2,@r1:nline=r1
60760 IF nline>0 THEN nline!=nline ELSE
nline!=65536+nline
60770 IF deb>adr60000 THEN 61080
60780 IF lg>255 THEN PRINT#ca:PRINT#ca,"
Reduire long.ligne";nline!;"SVP":END
60790 POKE@zz$,lg:CALL@kdoke(1),@zz$,1,d
eb
60800 c1=1
60810 :
60820 IF NOT num THEN 60870
60830 yy=INSTR(c1,zz$,look1$):xx=INSTR(c
1,zz$,look2$)
60840 IF(xx OR yy)=0 THEN 60730
60850 IF yy>0 THEN IF xx=0 THEN xx=yy EL
SE xx=MIN(xx,yy)
60860 GOTO 60890
60870 :
60880 xx=INSTR(c1,zz$,look2$):IF xx=0 TH
EN 60730
60890 :
60900 c1=xx+1
60910 IF num THEN 61050
60920 ad=deb+xx+lv+2:IF type$=""THEN ad=
ad-1
60930 IF PEEK(ad)<>maju AND PEEK(ad)<>mi
nu THEN 60810
60940 IF UPPER$(MID$(zz$,xx+LEN(look2$),
lv))<>name$THEN 60810
60950 FOR k=ad+1 TO deb+lg-1
60960   IF PEEK(k)=32 THEN 60990
60970   IF PEEK(k)=40 THEN IF pg THEN 61
020 ELSE 60810
60980   IF pg THEN 60810 ELSE 61020
60990   :
61000 NEXT k
61010 IF pg THEN 60810
61020 :
61030 IF type$<>""THEN 61050
61040 type=PEEK(deb+xx-2):IF type<11 OR
type>13 THEN 60810
61050 :
61060 IF ref MOD 13=0 THEN PRINT#ca
61070 PRINT#ca,USING"######";nline!;:ref
=ref+1:GOTO 60810
61080 :
61090 PRINT#ca:PRINT#ca,"---------------
--------------------
61100 GOTO 60310
61110 :REM<BREAK>
61120 CLEAR:END:RETURN
61130 :'** LIGNE FIN - Ne pas enlever **
```

FRANCE RIVIERES

Gerard JOULAIN



Le titre est éloquent, le reste coule de source.
A signaler, pour les 664 et 6128, un décalage des caractères élargis. Mis à part cela, le programme fonctionne correctement.

```
10 '        FRANCE - RIVIERES
20 '
30 MEMORY &9FFF
40 FOR A=&A000 TO &A0AE
50 READ B$:POKE A,VAL("&"+B$)
60 NEXT
70 CALL &A000
80 DATA 01,09,A0,21,39,A0,C3,D1
90 DATA BC,1A,A0,C3,3D,A0,C3,50
100 DATA A0,C3,68,A0,C3,7B,A0,C3
110 DATA 93,A0,4D,4F,44,45,30,B1
120 DATA 4D,4F,44,45,31,B1,4D,4F
130 DATA 44,45,30,B2,4D,4F,44,45
140 DATA 31,B2,4D,4F,44,45,32,B2
150 DATA 00,00,00,00,00,FE,00,C0
160 DATA 3E,00,32,C8,B1,3E,CC,32
170 DATA CF,B1,3E,33,32,D0,B1,C9
180 DATA FE,00,C0,3E,01,32,C8,B1
190 DATA 11,CF,B1,21,64,A0,01,04
200 DATA 00,ED,B0,C9,88,44,22,11
210 DATA FE,00,C0,3E,00,32,C8,B1
220 DATA 3E,F0,32,CF,B1,3E,0F,32
230 DATA D0,B1,C9,FE,00,C0,3E,01
240 DATA 32,C8,B1,11,CF,B1,21,BF
250 DATA A0,01,04,00,ED,B0,C9,C0
260 DATA 30,0C,03,FE,00,C0,3E,02
270 DATA 32,C8,B1,11,CF,B1,21,A7
280 DATA A0,01,08,00,ED,B0,C9,80
290 DATA 40,20,10,08,04,02,01
300 RESTORE 350
310 FOR A=&A2E6 TO &A2E6+148
320 READ B$:POKE A,VAL("&"+B$)
330 NEXT
340 CALL &A2E6
350 DATA 01,F3,A2,21,EF,A2,C3,D1,BC,00,0
0,00,00,F8
360 DATA A2,C3,FE,A2,44,48,41,55,D4,00
370 DATA DD,6E,00,DD,66,01,46,23,5E,23
380 DATA 56,EB,7E,E5,0E,20,91,6F,26,00
390 DATA C5,06,03,54,5D,19,10,FB,11,00
400 DATA 39,19,3E,19,CD,5A,BB,3E,FE,CD
410 DATA 5A,BB,06,04,CD,06,B9,4F,5E,79
420 DATA CD,0C,B9,7B,CD,5A,BB,CD,5A,BB
430 DATA 23,10,ED,3E,19,CD,5A,BB,3E,FF
440 DATA CD,5A,BB,06,04,CD,06,B9,4F,5E
450 DATA 79,CD,0C,B9,7B,CD,5A,BB,CD,5A
460 DATA BB,23,10,ED,3E,FE,CD,5A,BB,3E
470 DATA 0A,CD,5A,BB,3E,0B,CD,5A,BB,3E
480 DATA FF,CD,5A,BB,3E,0B,CD,5A,BB,C1
490 DATA E1,23,10,90,C9
500 MODE 2:BORDER 21
510 |MODE12:LOCATE 14,2:PRINT "Gerard JO
ULAIN":FOR I=1 TO 1000:NEXT
520 |MODE22:LOCATE 36,6:PRINT "presente"
:FOR I=1 TO 500:NEXT
530 |MODE02:LOCATE 6,12:A$="LA FRANCE":|
DHAUT,@A$:LOCATE 8,16:PRINT "et ses":LOC
ATE 5,19:A$="COURS D'EAU":|DHAUT,@A$
540 |MODE22:LOCATE 38,24:PRINT "1986"
550 RUN "riviere"
```

```
10 '        FRANCE - RIVIERES II
20 '
30 DIM RI$(66),RX(66),RY(66),BA$(66),VI$
(81),VX(81),VY(81),RIV$(81),VA$(81),DE(8
1)
40 GOSUB 4730:GOSUB 4970:POKE &B4E8,255:
GOTO 3050
50 DATA -10,-3,-6,-1,-4,-4,-2,-2,0,-18,-
1,-4,-5,-8,-8,-6,-2,0,-2,-2,-4,0,-6,-4,-
4,0,-4,-8,2,-2,4,-1,-4,-1,-8,-6,-4,3,-10
,1
60 DATA -6,2,-4,-2,0,4,-4,0,-2,4,4,4,-4,
2,-6,-2,-8,2,-1,-1,3,-3,0,-6,8,-10,-2,-4
,1,-12,3,-2,-10,-2,0,4,-4,0,-4,-4
70 DATA -2,2,0,2,-4,0,-6,-6,-10,14,-10,-
2,-3,-6,-5,2,0,-4,-2,0,-2,4,-12,-2,-8,-4
,2,-4,4,1,6,0,0,-4,-5,0,-2,2,-1,-1,0,-4
80 DATA 1,-1,0,2,6,0,0,-4,-6,0,-4,-2,6,-
4,2,-6,4,0,0,4,6,-2,2,-2,3,1,8,-4,2,-2,2
,-4,2,-3,0,3,4,1,5,1,2,-3
90 DATA -4,0,1,-2,4,-1,6,1,1,-3,-3,-1,0,
-4,2,-2,8,2,3,1,6,-5,-5,2,-5,-2,4,-2,2,-
4,-4,-4,0,-4,8,-10,8,-6,10,-2,-4,-4,4,-4
,0,-6,-4,-4
100 DATA 0,-3,8,-3,6,-8,2,-12,-4,10,-10,
8,0,-18,-2,-22,0,-4,-6,-28,-2,-4,-3,-4,-
3,-2,3,-4,3,2,4,-2,0,-4,-2,-2,4,-2
110 DATA -1,3,3,0,2,-4,6,-2,4,0,8,-6,5,2
,5,-2,4,-4,6,2,0,-2,12,1,0,5,10,-2,2,-2,
4,0,4,-4,2,2,8,-3,-2,-3
120 DATA 2,-2,4,0,2,-4,8,4,8,-5,3,1,-1,3
,8,2,5,0,0,2,-4,4,1,2,0,12,-3,3,2,2,2,-2
,5,5,6,2,14,12,3,-4
130 DATA 6,-2,5,-4,0,5,-3,1,-2,-2,5,-4,6
,1,0,4,3,0,3,-4,8,2,2,-2,-2,-2,13,-3,6,-
4,2,2,10,0,8,6,-3,2,1,2,8,4,-1,2,7,4,0,2
140 DATA 12,4,-2,6,6,4,-4,4,-5,-2,-12,4,
```

```
-3,4,0,4,-2,4,4,6,0,4,-6,2,-6,6,0,2,10,2
,2,4,2,8,-6,4,0,4,-4,4
150 DATA 6,8,-8,6,-2,6,-4,4,-6,-2,-5,-3,
1,-3,-4,-3,-4,-1,-1,2,5,4,-2,6,2,6,6,8,-
2,5,6,2,10,12,-6,0,6,6,2,-4
160 DATA 6,2,2,4,-2,6,2,10,-2,4,4,10,0,1
0,8,12,-4,2,-10,0,-6,4,-4,-2,-3,0,-2,3,-
3,-1,0,-2,-2,0,-8,12,-2,0,-2,2,-8,-4,-4,
4,-4,0,-2,-2
170 DATA -8,6,-8,4,0,4,-2,0,0,8,-3,0,-3,
-8,-8,0,0,6,-2,2,0,4,-4,2,-8,0,-2,6,-6,0
,-5,8,-5,-2,-8,4,0,6,-3,4,-100,100
180 RESTORE 190:GOTO 4890
190 DATA -2,4,0,2,-4,4,1,2,-2,4,-3,4,-3,
4,-4,2,-2,4,-3,2,-3,3,-3,2,-6,-3,-4,0,-4
,-3,-4,-1,-4,0,-3,2,-1,2,-4,2,-4,4,0,2,2
,2,-3,3,-3,-1,1,4,-3,-2,0,4,-2,0,-1,-3,-
3,2,-3,-2,-2,2,-2,-1,1,3,0,2,-2,-2,-5,5,
1,2,-1,2,-2,-2,0,2,-3,1
200 DATA -3,0,0,1,2,1,0,3,-2,0,-2,-3,-2,
4,-1,-3,-1,2,0,2,-2,2,-2,-2,0,-2,-2,0,-2
,2,-2,-2,-100,90
210 RESTORE 220:GOTO 4890
220 DATA -4,5,-5,3,-1,9,-13,11,-5,2,-6,1
,-100,90
230 RESTORE 240:GOTO 4890
240 DATA 1,2,-5,8,0,12,-4,5,-9,1,-5,8,-6
,5,-12,2,-8,-3,-2,-3,-3,1,-3,-1,0,2,-2,1
,0,-1,-1,0,0,-2,-4,1,0,-2,-3,0,1,-2,-3,1
,-1,-1,-100,90
250 RESTORE 260:GOTO 4890
260 DATA -4,-2,-2,-2,-4,0,-6,-2,-2,2,-2,
-4,-4,-3,0,-5,-6,-2,-2,-2,0,-1,-2,0,-2,-
2,-2,-5,-4,0,-3,-2,-2,-4,-3,-1,-4,-3,0,-
2,-100,90
270 RESTORE 280:GOTO 4890
280 DATA -4,2,-4,4,0,8,-4,2,0,4,-4,3,-8,
0,-7,-5,-10,0,-3,-2,-6,2,-2,1,-100,90
290 RESTORE 300:GOTO 4890
300 DATA 2,-4,0,-8,-2,-4,0,-2,-100,90
310 RESTORE 320:GOTO 4890
320 DATA 0,4,-6,4,-5,10,2,6,-4,8,0,4,-5,
2,-1,4,-4,7,-3,1,-100,90
330 RESTORE 340:GOTO 4890
340 DATA -6,8,0,4,-4,4,-4,2,0,2,-6,4,-6,
0,-100,90
350 RESTORE 360:GOTO 4890
360 DATA -4,2,-3,4,0,6,-3,2,-2,13,4,2,-1
00,90
370 RESTORE 380:GOTO 4890
380 DATA 16,-4,1,8,-4,4,-1,3,2,3,-7,10,0
,5,-100,90
390 RESTORE 400:GOTO 4890
400 DATA 4,2,4,9,-2,9,-2,2,-2,0,-6,3,-10
0,100
410 RESTORE 420:GOTO 4890
420 DATA -2,-4,-4,4,-2,6,0,4,4,2,1,4,3,4
,0,6,-2,4,0,4,-4,6,0,2,2,2,-3,10,-2,2,1,
3,-6,2,-2,5,-4,5,-4,1,-4,4,-4,0,-2,8,-2,
4,0,8,-6,4,-6,4,-4,2,-2,2,-4,0,-2,2,-2,1
,-4,2,-4,-5,-6,-6,-10,-5,-5,1,-9,-4,-4,-
3
430 DATA -3,-1,-3,0,-6,7,-4,1,-4,-1,-2,-
3,-4,2,-10,-2,-6,-4,-4,-1,-6,3,-100,90
440 RESTORE 450:GOTO 4890
450 DATA 3,-1,-3,7,-6,10,-6,4,1,6,-5,10,
1,6,1,4,2,4,0,8,-4,10,0,4,-2,4,-6,4,1,6,
-100,90
460 RESTORE 470:GOTO 4890
470 DATA -2,2,0,12,1,2,0,8,-1,4,-6,7,-4,
5,-2,7,-8,4,-6,-1,-9,3,-8,1,-3,2,-2,0,-4
,-2,-4,0,-100,90
480 RESTORE 490:GOTO 4890
490 DATA -5,6,-3,2,-4,6,-8,2,-7,4,-5,8,-
4,3,-2,1,-4,-2,-6,2,-100,90
500 RESTORE 510:GOTO 4890
510 DATA -2,1,-2,-1,-6,2,-7,5,-7,-3,-2,3
,-4,1,-4,-1,-2,2,0,19,-2,6,-2,4,2,10,-2,
2,0,2,-4,1,-2,-1,-5,4,-3,2,-100,90
520 RESTORE 530:GOTO 4890
530 DATA 2,4,0,4,-8,10,-8,6,-2,4,-2,2,-1
2,2,-4,5,-2,1,-2,5,-2,1,-100,90
540 RESTORE 550:GOTO 4890
550 DATA -4,1,-2,3,-4,1,-1,3,-3,2,-6,4,-
3,2,-3,2,0,1,-100,90
560 RESTORE 570:GOTO 4890
570 DATA -2,-3,-8,-4,-4,-2,2,-2,5,-1,-1,
-3,2,-3,0,-6,-3,-2,-3,1,-1,-3,-2,0,-2,1,
-2,-1,-2,-2,-1,-4,-1,-1,-1,-3,-100,90
580 RESTORE 590:GOTO 4890
590 DATA 2,-1,3,-3,-3,-4,-2,-4,-8,-6,-4,
-1,2,1,-11,-5,-3,3,-8,-1,-3,-2,-1,-3,-5,
0,-100,90
600 RESTORE 610:GOTO 4890
610 DATA -6,2,-4,-3,0,-5,-3,-6,0,-6,1,-6
,0,-4,3,-4,-100,100
620 RESTORE 630:GOTO 4890
630 DATA -1,-5,-100,100
640 RESTORE 650:GOTO 4890
650 DATA -4,-5,-5,2,0,4,-3,2,-5,-2,-3,1,
-3,-3,-10,5,-10,6,-100,90
660 RESTORE 670:GOTO 4890
670 DATA -2,4,-6,0,-4,6,-4,2,8,10,-100,9
0
680 RESTORE 690:GOTO 4890
690 DATA 0,4,-4,3,0,2,-2,5,2,2,-2,5,-100
,90
700 RESTORE 710:GOTO 4890
710 DATA 2,-2,6,0,3,4,0,6,-2,2,-100,90
720 RESTORE 730:GOTO 4890
730 DATA 2,-6,0,-4,5,-4,-1,-4,-4,-4,-4,-
4,-100,90
740 RESTORE 750:GOTO 4890
750 DATA -2,-4,-4,0,-4,-2,-3,2,-5,-2,0,-
6,-1,-4,0,-4,-5,0,-2,-2,-4,-2,-2,-2,-4,0
,-100,90
760 RESTORE 770:GOTO 4890
770 DATA -3,3,-5,-3,-2,2,-2,-4,-8,1,-8,-
1,-100,90
780 RESTORE 790:GOTO 4890
790 DATA -5,4,-1,4,-4,4,-4,0,0,-8,-4,-2,
0,-4,2,-4,-4,-2,-4,4,-8,2,-3,2,-1,4,-10,
5,-100,90
800 RESTORE 810:GOTO 4890
810 DATA -4,6,-2,8,0,8,-2,4,-8,4,-14,2,-
4,-3,-4,-1,-4,-6,-4,-1,-2,3,-100,90
820 RESTORE 830:GOTO 4890
830 DATA 0,4,-2,4,1,3,-5,3,-4,6,-4,3,-4,
1,-4,2,-4,3,-4,-1,-4,-1,-100,90
840 RESTORE 850:GOTO 4890
850 DATA 3,0,3,2,9,4,5,0,4,2,3,0,-100,90
860 RESTORE 870:GOTO 4890
870 DATA 3,0,0,4,-1,2,3,3,1,10,4,5,6,-2,
2,2,12,2,4,-2,-100,90
880 RESTORE 890:GOTO 4890
890 DATA 2,-4,0,-8,-4,-3,0,-4,-3,-7,1,-3
,-100,90
900 RESTORE 910:GOTO 4890
910 DATA 3,-4,-2,-4,1,-1,10,-2,2,-3,-1,-
4,1,-2,-100,100
920 RESTORE 930:GOTO 4890
930 DATA -6,4,0,5,-4,5,0,3,7,-1,7,4,4,6,
4,6,0,4,-4,8,-6,8,-2,0,-7,3,-1,3,-6,2,-2
,2,0,2,-4,4,-6,4,-2,-2,-3,0,-1,4,-6,6,2,
4,-4,6,0,4,-2,4,-100,90
940 RESTORE 950:GOTO 4890
950 DATA 2,6,-6,6,0,8,-2,8,-2,2,0,2,-2,4
,-100,90
960 RESTORE 970:GOTO 4890
970 DATA -4,-2,-2,2,-4,-2,-2,0,-4,-4,-2,
-4,-6,-4,-4,0,-2,-2,-8,-2,-4,0,-8,-2,-4,
-3,-4,0,-4,3,-2,2,-2,5,-4,1,-2,-2,-100,9
0
980 RESTORE 990:GOTO 4890
990 DATA -6,4,-8,-3,-8,1,-2,0,-5,-4,-1,-
4,-6,-2,-2,-2,-4,2,-6,1,-1,-1,-100,90
1000 RESTORE 1010:GOTO 4890
1010 DATA -10,0,-6,-2,-4,2,-6,0,-4,5,-8,
-2,-1,-3,-3,0,-4,-2,-24,0,-6,-4,-4,2,-6,
-2,-100,90
1020 RESTORE 1030:GOTO 4890
1030 DATA -4,2,-3,-4,0,-4,-3,0,-2,-4,-6,
-4,-4,-4,-4,-2,0,-5,-4,1,-2,-4,-2,0,0,2,
-3,0,-3,-2,-10,2,-2,2,-3,-2,-10,1,-3,2,0
,-2,-8,1,-4,2,0,2,-2,-1,-2,3,-3,1,-100,9
0
1040 RESTORE 1050:GOTO 4890
1050 DATA -11,-10,0,-6,-7,-2,-6,-6,-100,
90
1060 RESTORE 1070:GOTO 4890
1070 DATA -6,-5,-2,-7,-5,-3,-4,0,-5,-4,-
4,-2,-10,0,-2,-2,-100,90
1080 RESTORE 1090:GOTO 4890
1090 DATA -6,-4,0,-3,-4,-3,-6,-2,-2,2,-6
,-6,-2,-5,-100,90
1100 RESTORE 1110:GOTO 4890
1110 DATA 2,4,2,8,1,10,2,4,-2,4,2,4,-1,3
,-100,90
1120 RESTORE 1130:GOTO 4890
1130 DATA 0,6,2,2,-2,30,-2,4,2,2,-100,10
0
1140 RESTORE 1150:GOTO 4890
1150 DATA -10,-5,-2,4,-4,6,-6,-1,-3,-1,-
3,-2,-4,-2,-4,-4,1,4,2,2,1,2,2,2,2,1,3,1
,3,+1,4,-1,2,-2,-6,-1,-3,-1,-3,-2,-4,-2,
-4,-4,-4,-2,-4,-4,1,-4,-3,-12,-2,0,-2,4,
```

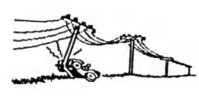
```
-4,4,-3,-2,-7,0
1160 DATA -2,-2,-2,-4,0,-2,2,-2,-4,-4,3,
-6,1,-6,1,-4,-1,-8,-2,-12,-2,-7,2,-3,2,-
4,2,-1,0,-2,-4,-3,-3,-4,1,-2,0,-2,-4,-2,
0,-3,-2,-1,0,-3,0,3,2,1,0,3,4,2,0,-2,3,-
4,1,-3,2,-2,-100,90
1170 RESTORE 1180:GOTO 4890
1180 DATA -4,0,-2,-2,-2,-6,0,-4,-2,-6,-2
,-2,-4,-6,-1,-8,-100,90
1190 RESTORE 1200:GOTO 4890
1200 DATA -4,-4,2,-2,0,-4,2,-2,-2,-4,-6,
-4,-6,-8,-2,-6,-6,-4,-2,-6,3,-6,0,-6,-2,
-12,-1,-10,2,0,2,-6,-100,90
1210 RESTORE 1220:GOTO 4890
1220 DATA 4,4,-1,4,3,2,4,2,6,4,0,3,6,3,0
,4,-8,-4,-2,2,2,4,-2,0,-14,-8,-2,0,-4,-6
,-3,2,-17,-5,-100,90
1230 RESTORE 1240:GOTO 4890
1240 DATA -4,-6,-3,-6,-5,-6,-4,0,-2,-2,-
4,-2,-2,0,-4,2,-100,90
1250 RESTORE 1260:GOTO 4890
1260 DATA 6,1,1,-2,-2,-5,9,-4,-100,90
1270 RESTORE 1280:GOTO 4890
1280 DATA 2,-2,4,-2,3,0,5,-3,8,0,2,-3,-1
00,90
1290 RESTORE 1300:GOTO 4890
1300 DATA 2,2,-4,6,-7,-4,-3,2,-2,4,-3,-4
,-5,-4,-4,-10,-4,0,-4,2,-2,-4,-6,-4,-6,-
2,-3,-2,-100,90
1310 RESTORE 1320:GOTO 4890
1320 DATA -2,-2,-4,-2,-1,-2,-3,-2,-6,2,-
2,2,-3,4,1,4,-3,1,-100,90
1330 RESTORE 1340:GOTO 4890
1340 DATA -2,-2,1,0,0,-2,-2,0,-4,2,-3,4,
-4,0,2,14,-100,90
1350 RESTORE 1360:GOTO 4890
1360 DATA -4,2,-3,4,-1,2,-4,2,-1,-2,-3,-
1,-4,3,-3,0,-100,90
1370 RESTORE 1380:GOTO 4890
1380 DATA 4,-2,0,-12,-4,-4,-10,-4,-2,-2,
0,-4,3,-6,-2,-4,0,-4,-3,-6,-6,-2,-8,4,-4
,0,-7,5,-2,0,-100,90
1390 RESTORE 1400:GOTO 4890
1400 DATA 0,-5,-2,-5,2,-4,-6,-5,-4,0,-2,
-3,-6,2,-2,-2,-100,100
1410 RESTORE 1420:GOTO 4890
1420 DATA -8,0,-2,6,2,10,-2,4,4,10,0,10,
8,12,4,8,2,6,-100,90
1430 RESTORE 1440:GOTO 4890
1440 DATA -4,2,4,6,0,6,1,6,-1,2,2,2,2,8,
3,7,1,0,-100,90
1450 RESTORE 1460:GOTO 4890
1460 DATA -4,4,-2,4,-2,2,-2,4,-4,4,-2,6,
-2,2,-4,2,-2,-1,2,3,4,2,-4,6,2,8,1,4,-1,
2,0,2,2,3,2,1,0,8,2,4,4,0,-100,90
1470 RESTORE 1480:GOTO 4890
1480 DATA -4,4,0,4,-6,4,-4,3,-4,5,-2,-2,
-4,4,-100,90
1490 RESTORE 1500:GOTO 4890
1500 DATA 2,8,2,6,0,6,-1,2,1,2,-3,2,-1,4
,-2,2,0,3,-4,6,-2,3,0,2,-3,4,0,4,-4,8,-4
,-2,-2,2,0,2,2,2,-4,4,2,6,0,6,2,-2,4,6,-
100,100
1510 RESTORE 1520:GOTO 4890
1520 DATA -2,-4,-2,-2,-2,-4,-2,-2,-4,-2,
-1,0,-100,100
1530 DATA LA SEINE,60,-130
1540 DATA L'AUBE,68,-124
1550 DATA LA MARNE,69,-118
1560 DATA L'OISE,44,-38
1570 DATA L'AISNE,66,-78
1580 DATA L'EPT,-20,-56
1590 DATA L'YONNE,40,-150
1600 DATA L'ARMANCON,54,-140
1610 DATA LE LOING,18,-130
1620 DATA L'EURE,-40,-96
1630 DATA LA RISLE,-50,-88
1640 DATA LA LOIRE,50,-232
1650 DATA L'ALLIER,40,-242
1660 DATA LE CHER,8,-192
1670 DATA L'INDRE,-4,-172
1680 DATA LA VIENNE,-6,-200
1690 DATA LA CREUSE,-5,-196
1700 DATA LA SEVRE NANTAISE,-70,-162
1710 DATA LA SARTHE,-48,-92
1720 DATA LE LOIR,-30,-103
1730 DATA LA MAYENNE,-64,-98
1740 DATA LA MAINE,-72,-130
1750 DATA LA SOMME,20,-44
1760 DATA L'ORNE,-56,-92
1770 DATA LA VIRE,-80,-86
1780 DATA LA RANCE,-123,-103
1790 DATA LE BLAVET,-142,-96
1800 DATA LA VILAINE,-84,-106
1810 DATA LA SEVRE NIORTAISE,-60,-170
1820 DATA LA CHARENTE,-40,-196
1830 DATA L'ADOUR,-52,-302
1840 DATA LE GAVE DE PAU,-60,-308
1850 DATA LE TET,-3,-314
1860 DATA L'AUDE,-6,-312
1870 DATA L'HERAULT,36,-256
1880 DATA LE VAR,118,-248
1890 DATA LA GARONNE,-34,-312
1900 DATA L'ARIEGE,-12,-316
1910 DATA LE TARN,40,-246
1920 DATA L'AVEYRON,22,-250
1930 DATA LE LOT,36,-242
1940 DATA LA DORDOGNE,14,-202
1950 DATA LA VEZERE,-10,-204
1960 DATA LA CORREZE,-8,-206
1970 DATA L'ISLE,-28,-198
1980 DATA LA DRONNE,-34,-198
1990 DATA LE GERS,-48,-294
2000 DATA LA BAISE,-50,-296
2010 DATA LE RHONE,135,-169
2020 DATA L'AIN,92,-156
2030 DATA LA SAONE,88,-108
2040 DATA LE DOUBS,96,-156
2050 DATA L'OGNON,104,-116
2060 DATA L'ARDECHE,50,-237
2070 DATA LE GARD,40,-254
2080 DATA L'ISERE,122,-204
2090 DATA L'ARC,126,-204
2100 DATA LE DRAC,104,-228
2110 DATA LA DROME,92,-240
2120 DATA LA DURANCE,108,-220
2130 DATA LE VERDON,114,-246
2140 DATA LE RHIN,138,-122
2150 DATA L'ILL,124,-121
2160 DATA LA MOSELLE,110,-112
2170 DATA LA MEURTHE,116,-102
2180 DATA LA MEUSE,77,-110
2190 DATA TROYES,46,-108,LA SEINE
2200 DATA MELUN,6,-96,LA SEINE
2210 DATA PARIS,-2,-84,LA SEINE
2220 DATA ROUEN,-32,-62,LA SEINE
2230 DATA LE HAVRE,-54,-60,LA SEINE
2240 DATA SAINT-DIZIER,61,-91,LA MARNE
2250 DATA CHALONS-SUR-MARNE,44,-80,LA MA
RNE
2260 DATA SOISSONS,22,-62,L'AISNE
2270 DATA COMPIEGNE,8,-60,L'OISE
2280 DATA CHARTRES,-22,-98,L'EURE
2290 DATA LE PUY,43,-228,LA LOIRE
2300 DATA ROANNE,45,-186,LA LOIRE
2310 DATA NEVERS,20,-154,LA LOIRE
2320 DATA ORLEANS,-14,-119,LA LOIRE
2330 DATA BLOIS,-26,-130,LA LOIRE
2340 DATA TOURS,-45,-136,LA LOIRE
2350 DATA NANTES,-96,-142,LA LOIRE
2360 DATA SAINT-NAZAIRE,-115,-136,LA LOI
RE
2370 DATA VICHY,28,-184,L'ALLIER
2380 DATA MOULINS,23,-166,L'ALLIER
2390 DATA MONTLUCON,7,-176,LE CHER
2400 DATA VIERZON,-5,-144,LE CHER
2410 DATA CHATEAUROUX,-16,-158,L'INDRE
2420 DATA LIMOGES,-26,-194,LA VIENNE
2430 DATA CHATELLERAULT,-46,-158,LA VIEN
NE
2440 DATA AUBUSSON,-4,-188,LA CREUSE
2450 DATA ALENCON,-56,-98,LA SARTHE
2460 DATA LE MANS,-54,-116,LA SARTHE
2470 DATA VENDOME,-37,-120,LE LOIR
2480 DATA LAVAL,-77,-114,LA MAYENNE
2490 DATA ANGERS,-73,-132,LA MAINE
2500 DATA SAINT-GAUDENS,-40,-296,LA GARO
NNE
2510 DATA TOULOUSE,-22,-276,LA GARONNE
2520 DATA AGEN,-42,-254,LA GARONNE
2530 DATA BORDEAUX,-72,-226,LA GARONNE
2540 DATA FOIX,-16,-300,L'ARIEGE
2550 DATA MILLAU,22,-256,LE TARN
2560 DATA ALBI,2,-264,LE TARN
2570 DATA MONTAUBAN,-24,-262,LE TARN
2580 DATA RODEZ,10,-248,L'AVEYRON
2590 DATA VILLEFRANCHE-DE-ROUERGUE,-4,-2
50,L'AVEYRON
2600 DATA MENDE,28,-242,LE LOT
2610 DATA CAHORS,-20,-244,LE LOT
2620 DATA BERGERAC,-48,-227,LA DORDOGNE
2630 DATA BRIVE-LA-GAILLARDE,-18,-220,LA
 CORREZE
2640 DATA PERIGUEUX,-40,-212,L'ISLE
2650 DATA LYON,69,-192,LE RHONE
2660 DATA VALENCE,71,-225,LE RHONE
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2670 DATA AVIGNON,70,-257,LE RHONE
2680 DATA ARLES,64,-268,LE RHONE
2690 DATA CHALON-SUR-SAONE,65,-152,LA SA
ONE
2700 DATA MACON,65,-176,LA SAONE
2710 DATA BESANCON,90,-138,LE DOUBS
2720 DATA GRENOBLE,93,-212,L'ISERE
2730 DATA BRIANCON,112,-224,LA DURANCE
2740 DATA STRASBOURG,130,-82,LE RHIN
2750 DATA MULHOUSE,122,-116,L'ILL
2760 DATA COLMAR,122,-106,L'ILL
2770 DATA EPINAL,103,-104,LA MOSELLE
2780 DATA METZ,90,-68,LA MOSELLE
2790 DATA NANCY,94,-82,LA MEURTHE
2800 DATA VERDUN,70,-66,LA MEUSE
2810 DATA SEDAN,60,-50,LA MEUSE
2820 DATA CHARLEVILLE-MEZIERES,54,-46,LA
 MEUSE
2830 DATA AMIENS,-2,-44,LA SOMME
2840 DATA CAEN,-66,-72,L'ORNE
2850 DATA SAINT-LO,-84,-76,LA VIRE
2860 DATA DINAN,-112,-98,LA RANCE
2870 DATA LORIENT,-140,-120,LE BLAVET
2880 DATA RENNES,-102,-112,LA VILAINE
2890 DATA NIORT,-71,-172,LA SEVRE NIORTA
ISE
2900 DATA ANGOULEME,-58,-202,LA CHARENTE
2910 DATA TARBES,-56,-290,L'ADOUR
2920 DATA DAX,-88,-274,L'ADOUR
2930 DATA BAYONNE,-98,-280,L'ADOUR
2940 DATA LOURDES,-62,-296,LE GAVE DE PA
U
2950 DATA PAU,-72,-288,LE GAVE DE PAU
2960 DATA PERPIGNAN,18,-308,LE TET
2970 DATA CARCASSONNE,2,-292,L'AUDE
2980 DATA NICE,132,-266,LE VAR
2990 DATA bassin de LA SEINE,320,390,2,S
,1,11,1,10
3000 DATA bassin de LA LOIRE,320,550,2,L
,12,22,11,31
3010 DATA bassin de LA GARONNE,320,690,2
,G,37,48,32,46
3020 DATA bassin du RHONE,200,600,2,R,49
,61,47,55
3030 DATA bassin du RHIN,200,380,2,RH,62
,66,56,64
3040 DATA FLEUVES COTIERS,320,375,1,FC,2
3,36,65,80
3050 BORDER 1:INK 0,1:INK 1,24:INK 2,21:
INK 3,11:PEN 1
3060 MODE 1:A=320:B=390:CF=1:EC=1:GOSUB
4840
3070 CR=3:FOR RI=1 TO 66:GOSUB 4680:NEXT
3080 CV=2:FOR VI=1 TO 80:GOSUB 5260:NEXT
3090 GOSUB 5180:INK 1,24,15:|MODE01:A$="
LA FRANCE":LOCATE 7,7:|DHAUT,@A$:LOCATE
9,11:PRINT "et ses":A$="COURS d'EAU":LOC
ATE 6,15:|DHAUT,@A$:|MODE11:GOSUB 5180:G
OSUB 5180:INK 1,24
3100 INK 0,22:INK 1,16:MODE 2:GOSUB 4840
:|MODE02:A$="BONJOUR ":LOCATE 7,7:|DHAUT
,@A$:|MODE12
3110 LOCATE 5,11:PRINT "Nous allons deco
uvrir ensemble":LOCATE 1,13:PRINT "la FR
ANCE et ses COURS d'EAU,fleuves et":LOCA
TE 1,15:PRINT "rivieres,ainsi que les VI
LLES arrosees.":LOCATE 5,17:PRINT "J'esp
ere que vous aurez plaisir a"
3120 LOCATE 1,19:PRINT "jouer et etudier
 avec moi.":|MODE22:LOCATE 4,23:PRINT "A
pres chaque BIP sonore,appuyez sur une t
ouche pour continuer.":|MODE12:GOSUB 503
0:|MODE22
3130 INK 0,14:INK 1,7:MODE 2:|MODE12:LOC
ATE 5,5:PRINT "Tout d'abord,quel est vot
re NOM ?":|MODE22:LOCATE 18,7:PRINT "( E
crivez votre NOM,puis appuyez sur ENTER
)"
3140 |MODE02:LOCATE 5,14:INPUT "",NOM$:I
F LEN(NOM$)>10 THEN NOM$=LEFT$(NOM$,10)
3150 |MODE22
3160 MODE 1:BORDER 23:INK 0,0:INK 1,24:I
NK 2,21:INK 3,11:PEN 2:A=320:B=390:CF=1:
EC=1:GOSUB 4840
3170 |MODE01:LOCATE 5,5:PRINT nom$:|MODE
11:LOCATE 5,10:PRINT "Vous pouvez :":LOC
ATE 2,13:PRINT "1 - etudier les cours d'
eau":LOCATE 2,15:PRINT "2 - etudier les
villes":LOCATE 2,17:PRINT "3 - reconstit
uer la FRANCE"
3180 LOCATE 2,19:PRINT "4 - jouer avec l
es cours d'eau":LOCATE 2,21:PRINT "5 - j
ouer avec les villes":LOCATE 2,23:PRINT
"6 - jouer avec villes et cours d'eau":L
OCATE 2,25:PRINT "7 - fin du programme":
nc=7:GOSUB 4940
3190 ON c GOTO 3200,3430,4340,3670,3900,
4130,4630
3200 BORDER 11:PEN 1:GOSUB 5060:GOSUB 50
90
3210 CLG:A=320:B=390:EC=1:GOSUB 4840:LOC
ATE#1,(40-LEN(BS$(BB)))/2,1:PRINT#1,BS$(
BB)
3220 CR=3:FOR RI=DEBR(BB) TO FINR(BB):GO
SUB 4680:NEXT:GOSUB 5180:GOSUB 5180
3230 CLG:A=BX(BB):B=BY(BB):EC=EC(BB):GOS
UB 4840:LOCATE#1,(40-LEN(BS$(BB)))/2,1:P
RINT#1,BS$(BB)
3240 FOR RI=DEBR(BB) TO FINR(BB):GOSUB 5
200:GOSUB 5180:NEXT:GOSUB 5030
3250 CLG:LOCATE 5,5:PRINT "Vous pouvez m
aintenant placer le":LOCATE 2,7:PRINT "c
ours d'eau de votre choix.Pour cela,":LO
CATE 2,9:PRINT "ecrivez le NOM desire,pu
is validez-le"
3260 LOCATE 10,12:PRINT "ex: ";RI$(DEBR(
BB));" + (ENTER)":LOCATE 2,16:PRINT "Si
vous ne savez plus un nom,inscrivez":LOC
ATE 2,18:PRINT "AIDE.Pour continuer le p
rogramme":LOCATE 2,20:PRINT "ecrivez SUI
TE.":GOSUB 5030
3270 CLG:GOSUB 4840
3280 CLS#1:CLS#2:LOCATE#1,5,1:INPUT#1,"V
otre choix ? ",RC$
3290 IF RC$="SUITE" THEN 3200
3300 IF RC$="AIDE" THEN FOR I=DEBR(BB) T
O FINR(BB):CLS#1:LOCATE#1,(40-LEN(RI$(I)
))/2,1:PRINT#1,RI$(I):GOSUB 5030:LOCATE
20,25:PRINT CHR$(128):NEXT:GOTO 3280
3310 FOR I=DEBR(BB) TO FINR(BB)
3320 IF RC$=RI$(I) THEN RI=I:GOSUB 5200:
GOTO 3280
3330 NEXT
3340 FOR I=1 TO 66
3350 IF RC$=RI$(I) THEN 3410
3360 NEXT
3370 FOR I=1 TO 80
3380 IF RC$=VI$(I) THEN 3420
3390 NEXT
3400 GOTO 3280
3410 CLS#1:LOCATE (28-LEN(RC$))/2,24:PEN
 2:PRINT "ATTENTION ! ";RC$:LOCATE 3,25:
PRINT "ne fait pas partie du bassin etud
ie":GOSUB 5180:GOSUB 5180:GOSUB 5180:LOC
ATE 1,25:PRINT STRING$(38,CHR$(128)):GOT
O 3280
3420 CLS#1:LOCATE (28-LEN(RC$))/2,24:PEN
 2:PRINT "ATTENTION ! ";RC$:LOCATE 3,25:
PRINT "est une VILLE et non un COURS d'E
AU":GOSUB 5180:GOSUB 5180:GOSUB 5180:LOC
ATE 1,25:PRINT STRING$(38,CHR$(128)):GOT
O 3280
3430 BORDER 11:PEN 1:GOSUB 5060:GOSUB 50
90
3440 CLG:A=320:B=390:EC=1:GOSUB 4840:LOC
ATE#1,(40-LEN(BS$(BB)))/2,1:PRINT#1,BS$(
BB)
3450 CR=3:FOR RI=DEBR(BB) TO FINR(BB):GO
SUB 4680:NEXT:GOSUB 5180:CV=2:FOR VI=DEB
V(BB) TO FINV(BB):GOSUB 5260:NEXT:GOSUB
5180:GOSUB 5180
3460 CLG:A=BX(BB):B=BY(BB):EC=EC(BB):GOS
UB 4840:LOCATE#1,(40-LEN(BS$(BB)))/2,1:P
RINT#1,BS$(BB)
3470 FOR RI=DEBR(BB) TO FINR(BB):GOSUB 4
680:NEXT
3480 FOR VI=DEBV(BB) TO FINV(BB):GOSUB 5
340:GOSUB 5370:GOSUB 5180:NEXT:GOSUB 503
0
3490 CLG:LOCATE 5,5:PRINT "Vous pouvez m
aintenant placer la":LOCATE 2,7:PRINT "v
ille de votre choix.Pour cela,":LOCATE 2
,9:PRINT "ecrivez le NOM desire,puis val
idez-le"
3500 LOCATE 10,12:PRINT "ex: ";VI$(DEBV(
BB));" + (ENTER)":LOCATE 2,16:PRINT "Si
vous ne savez plus un nom,inscrivez":LOC
ATE 2,18:PRINT "AIDE.Pour continuer le p
rogramme":LOCATE 2,20:PRINT "ecrivez SUI
TE.":GOSUB 5030
3510 CLG:GOSUB 4840:CR=3:FOR RI=DEBR(BB)
 TO FINR(BB):GOSUB 4680:NEXT:GOSUB 5180
3520 CLS#1:CLS#2:LOCATE#1,2,1:INPUT#1,"V
otre choix ? ",RC$
3530 IF RC$="SUITE" THEN 3430
3540 IF RC$="AIDE" THEN FOR I=DEBV(BB) T
```

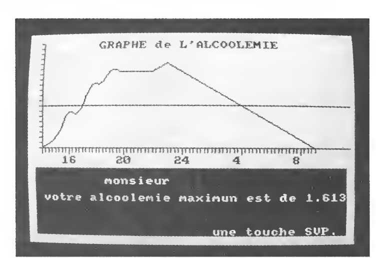
```
O FINV(BB):CLS#1:LOCATE#1,(40-LEN(VI$(I)
))/2,1:PRINT#1,VI$(I):GOSUB 5030:LOCATE
20,25:PRINT CHR$(128):NEXT:GOTO 3520
3550 FOR I=DEBV(BB) TO FINV(BB)
3560 IF RC$=VI$(I) THEN VI=I:GOSUB 5340:
GOSUB 5370:GOTO 3520
3570 NEXT
3580 FOR I=1 TO 80
3590 IF RC$=VI$(I) THEN 3650
3600 NEXT
3610 FOR I=1 TO 66
3620 IF RC$=RI$(I) THEN 3660
3630 NEXT
3640 GOTO 3520
3650 CLS#1:LOCATE (28-LEN(RC$))/2,24:PEN
 2:PRINT "ATTENTION ! ";RC$:LOCATE 3,25:
PRINT "ne fait pas partie du bassin etud
ie":GOSUB 5180:GOSUB 5180:GOSUB 5180:LOC
ATE 1,25:PRINT STRING$(38,CHR$(128)):GOT
O 3520
3660 CLS#1:LOCATE (28-LEN(RC$))/2,24:PEN
 2:PRINT "ATTENTION ! ";RC$:LOCATE 3,25:
PRINT "est un COURS d'EAU et non une VIL
LE":GOSUB 5180:GOSUB 5180:GOSUB 5180:LOC
ATE 1,25:PRINT STRING$(38,CHR$(128)):GOT
O 3520
3670 MODE 1:LOCATE 5,8:PRINT "Pour quitt
er ce programme en cours,":LOCATE 2,10:P
RINT "appuyez sur S apres un BIP sonore.
":LOCATE 5,13:PRINT "Pour continuer,appu
yez sur une autre":LOCATE 2,15:PRINT "to
uche.":GOSUB 5030:GOSUB 5390:JJ=66:GOSUB
 5460
3680 MODE 1:BORDER 17:A=460:B=398:CF=3:E
C=1:GOSUB 4840
3690 WINDOW#2,1,21,11,25:WINDOW#3,1,17,1
,10:PAPER#2,2:PAPER#3,0
3700 CR=3:FOR RI=1 TO 66:GOSUB 4680:NEXT
3710 GOSUB 5470
3720 IF DC=67 THEN CLS#2:LOCATE#2,3,6:PR
INT#2,"Vous avez termine":GOSUB 5030:GOT
O 3840
3730 CR=1:RI=NU:GOSUB 4680
3740 FOR JO=1 TO NJ
3750 CLS#2:LOCATE#2,3,2:PEN#2,0:PRINT#2,
JO$(JO):LOCATE#2,3,4:PEN#2,1:PRINT#2,"Mo
n NOM ?":LOCATE#2,1,8:PEN#2,3:INPUT#2,""
,RD$(JO)
3760 IF DC=67 THEN CLS#2:LOCATE#2,3,6:PR
INT#2,"Vous avez termine":GOSUB 5030:GOT
O 3840
3770 IF LEN(RD$(JO))>20 THEN 3750
3780 NEXT
3790 FOR JO=1 TO NJ
3800 IF RD$(JO)=RI$(NU) THEN PT(JO)=PT(J
O)+10
3810 NEXT
3820 CLS#2:LOCATE#2,1,1:PEN#2,3:PRINT#2,
STRING$(20,"*"):|MODE01:LOCATE#2,2,3:PEN
#2,0:PRINT#2,"REPONSE":|MODE11:LOCATE#2,
3,5:PEN#2,1:PRINT#2,RI$(NU):LOCATE#2,3,6
:PEN#2,3:PRINT#2,STRING$(LEN(RI$(NU)),CH
R$(218))
3830 PRINT#2:PEN#2,3:FOR JO=1 TO NJ:PRIN
T#2,JO$(JO);":"RD$(JO):NEXT
3840 |MODE01:PEN#3,1:LOCATE#3,2,2:PRINT#
3,"SCORES":|MODE11
3850 FOR JO=1 TO NJ
3860 PEN#3,2:LOCATE#3,2,2+JO*2:PRINT#3,J
O$(JO):LOCATE#3,13,2+JO*2:PRINT#3,PT(JO)
3870 NEXT
3880 GOSUB 5030:CLS#3:IF DC=67 THEN 3160
3890 CR=3:GOSUB 4680:GOTO 3710
3900 MODE 1:LOCATE 5,8:PRINT "Pour quitt
er ce programme en cours,":LOCATE 2,10:P
RINT "appuyez sur S apres un BIP sonore.
":LOCATE 5,13:PRINT "Pour continuer,appu
yez sur une autre":LOCATE 2,15:PRINT "to
uche.":GOSUB 5030:GOSUB 5390:JJ=80:GOSUB
 5460
3910 MODE 1:BORDER 17:A=492:B=398:CF=3:E
C=1:GOSUB 4840
3920 WINDOW#2,1,24,11,25:WINDOW#3,1,17,1
,10:PAPER#2,2
3930 CR=3:FOR RI=1 TO 66:GOSUB 4680:NEXT
:CV=3:FOR VI=1 TO 80:GOSUB 5260:NEXT
3940 GOSUB 5470
3950 IF DC=81 THEN CLS#2:LOCATE#2,3,6:PR
INT#2,"Vous avez termine":GOSUB 5030:GOT
O 4070
3960 CV=1:VI=NU:GOSUB 5260
3970 FOR JO=1 TO NJ
3980 CLS#2:|MODE01:PEN#2,3:LOCATE#2,2,2:
PRINT#2,JO$(JO):|MODE11:LOCATE#2,3,5:PEN
#2,1:PRINT#2,"Mon NOM ?":LOCATE#2,1,8:PE
N#2,3:INPUT#2,"",RV$(JO)
3990 IF DC=81 THEN CLS#2:LOCATE#2,3,6:PR
INT#2,"Vous avez termine":GOSUB 5030:GOT
O 4070
4000 IF LEN(RV$(JO))>25 THEN 3980
4010 NEXT
4020 FOR JO=1 TO NJ
4030 IF RV$(JO)=VI$(NU) THEN PT(JO)=PT(J
O)+10
4040 NEXT
4050 CLS#2:LOCATE#2,1,1:PRINT#2,STRING$(
20,"*"):|MODE01:PEN#2,0:LOCATE#2,2,3:PRI
NT#2,"REPONSE":|MODE11:LOCATE#2,3,5:PEN#
2,1:PRINT#2,VI$(NU):LOCATE#2,3,6:PEN#2,3
:PRINT#2,STRING$(LEN(VI$(NU)),CHR$(218))
4060 PRINT#2:FOR JO=1 TO NJ:PRINT#2,JO$(
JO);":"RV$(JO):NEXT
4070 PAPER#3,3:CLS#3:|MODE01:LOCATE#3,2,
2:PEN#3,1:PRINT#3,"SCORES":|MODE11
4080 FOR JO=1 TO NJ
4090 LOCATE#3,2,2+JO*2:PEN#3,2:PRINT#3,J
O$(JO):LOCATE#3,13,2+JO*2:PRINT#3,PT(JO)
4100 NEXT
4110 GOSUB 5030:PAPER#3,0:CLS#3:IF DC=81
 THEN 3160
4120 CV=3:GOSUB 5260:GOTO 3940
4130 MODE 1:LOCATE 5,8:PRINT "Pour quitt
er ce programme en cours,":LOCATE 2,10:P
RINT "appuyez sur S apres un BIP sonore.
":LOCATE 5,13:PRINT "Pour continuer,appu
yez sur une autre":LOCATE 2,15:PRINT "to
uche.":GOSUB 5030:GOSUB 5390:JJ=80:GOSUB
 5460
4140 WINDOW#2,1,40,11,25:WINDOW#3,1,15,1
,10:WINDOW#4,15,40,1,10:PAPER#2,1
4150 GOSUB 5470
4160 IF DC=81 THEN CLS:LOCATE#2,12,4:PRI
NT#2,"Vous avez termine":GOSUB 5030:GOTO
 4280
4170 CLS:PEN#4,2:LOCATE#4,3,2:PRINT#4,"S
ur quel cours d'eau":LOCATE#4,9,4:PRINT#
4,"se situe":PRINT#4,CHR$(24):LOCATE#4,(
27-LEN(VI$(NU)))/2,7:PRINT#4,VI$(NU):PRI
NT#4,CHR$(24)
4180 FOR JO=1 TO NJ
4190 CLS#2:|MODE01:LOCATE#2,3,2:PEN#2,0:
PRINT#2,JO$(JO):|MODE11:PEN#2,3:LOCATE#2
,8,4:PRINT#2,"Votre reponse":LOCATE#2,8,
8:INPUT#2,"",RV$(JO)
4200 IF DC=81 THEN CLS#2:LOCATE#2,3,6:PR
INT#2,"Vous avez termine":GOSUB 5030:GOT
O 4280
4210 IF LEN(RV$(JO))>25 THEN 4190
4220 NEXT
4230 FOR JO=1 TO NJ
4240 IF RV$(JO)=RIV$(NU) THEN PT(JO)=PT(
JO)+10
4250 NEXT
4260 CLS#2:LOCATE#2,1,1:PEN#2,3:PRINT#2,
STRING$(40,"*"):|MODE01:LOCATE#2,8,3:PEN
#2,0:PRINT#2,"REPONSE":|MODE11:LOCATE#2,
(40-LEN(RIV$(NU)))/2,6:PEN#2,3:PRINT#2,R
IV$(NU):LOCATE#2,(40-LEN(RIV$(NU)))/2,7:
PRINT#2,STRING$(LEN(RIV$(NU)),CHR$(218))
4270 PRINT#2:PEN#2,0:FOR JO=1 TO NJ:PRIN
T#2,JO$(JO);" : "RV$(JO):PRINT#2:NEXT
4280 PAPER#3,2:CLS#3:|MODE01:LOCATE#3,2,
2:PEN#3,0:PRINT#3,"SCORES":|MODE11
4290 FOR JO=1 TO NJ
4300 PEN#3,3:LOCATE#3,1,2+JO*2:PRINT#3,J
O$(JO):LOCATE#3,11,2+JO*2:PRINT#3,PT(JO)
4310 NEXT
4320 GOSUB 5030:CLS#3:IF DC=81 THEN 3160
4330 GOTO 4150
4340 MODE 1:|MODE01:LOCATE 7,1:PRINT NOM
$:|MODE11:LOCATE 5,4:PRINT "Vous allez m
aintenant reconstituer":LOCATE 1,6:PRINT
 "la carte de la FRANCE.A vous de choisi
r":LOCATE 1,8:PRINT "les VILLES et les C
OURS d'EAU,moi,je les"
4350 LOCATE 1,10:PRINT "dessine a leur p
lace.":LOCATE 3,12:PRINT "Vous avez 66 c
ours d'eau et 80 villes":LOCATE 1,14:PRI
NT "a placer.":LOCATE 3,16:PRINT "Je ne
vous aiderais pas,mais je vous"
4360 LOCATE 1,18:PRINT "indiquerais les
oublis a la fin.":LOCATE 1,20:PRINT "ecr
ivez FIN si vous ne savez plus":LOCATE 1
,22:PRINT "ecrivez SUITE pour continuer.
":GOSUB 5030
4370 CLG:BORDER 11:INK 3,17:A=480:B=380:
```

```
EC=1:CF=3:GOSUB 4840
4380 WINDOW#1,1,40,24,24
4390 FOR I=1 TO 66:BA$(I)=RI$(I):NEXT:FO
R I=1 TO 80:VA$(I)=VI$(I):NEXT
4400 PR=0:PV=0:LOCATE 5,12:PEN 1:PRINT "
Vous avez place:":LOCATE 1,15:PEN 3:PRIN
T "COURS d'EAU :":LOCATE 1,18:PEN 2:PRIN
T "VILLES :":LOCATE 15,15:PEN 3:PRINT PR
:LOCATE 15,18:PEN 2:PRINT PV
4410 IF PR=66 AND PV=80 THEN CLS#1:LOCAT
E#1,2,1:PEN 3:PRINT#1,"Vous avez termine
 ,BRAVO":GOSUB 5030:GOTO 3160 ELSE CLS#1
:LOCATE 20,25:PRINT CHR$(128):LOCATE#1,2
,1:PAPER#1,1:PEN#1,0:INPUT#1,"Votre choi
x :",RC$
4420 IF RC$="SUITE" THEN 3160
4430 IF RC$="FIN" THEN 4510
4440 FOR RI=1 TO 66
4450 IF RC$=RI$(RI) AND RC$=BA$(RI) THEN
 BA$(RI)="":CR=1:GOSUB 4680:PR=PR+1:LOCA
TE 15,15:PEN 3:PRINT PR:GOSUB 5180:GOSUB
 5180:CLS#1:CR=3:GOSUB 4680:GOTO 4460 EL
SE IF RC$=RI$(RI) THEN CLS#1:PRINT#1,"
   Ce COURS d'EAU est deja place":GOSUB
5030
4460 NEXT
4470 FOR VI=1 TO 80
4480 IF RC$=VI$(VI) AND RC$=VA$(VI) THEN
 VA$(VI)="":CV=1:GOSUB 5260:PV=PV+1:LOCA
TE 15,18:PEN 2:PRINT PV:GOSUB 5180:GOSUB
 5180:CLS#1:CV=3:GOSUB 5260:GOTO 4490 EL
SE IF RC$=VI$(VI) THEN CLS#1:PRINT#1,"
   Cette VILLE est deja placee":GOSUB 50
30
4490 NEXT
4500 GOTO 4410
4510 CLS#1:LOCATE 5,12:PEN 1:PRINT "Il r
este a placer:":LOCATE 15,15:PEN 3:PRINT
 66-PR:LOCATE 15,18:PEN 2:PRINT 80-PV:GO
SUB 5180
4520 LOCATE 15,22:PEN 3:PRINT "COURS d'E
AU"
4530 FOR RI=1 TO 66
4540 IF BA$(RI)<>"" THEN PRINT#1,CHR$(30
)+CHR$(24):LOCATE#1,(40-LEN(BA$(RI)))/2,
1:PRINT#1,BA$(RI):PRINT#1,CHR$(30)+CHR$(
24):CR=1:GOSUB 4680:PR=PR+1:LOCATE 15,15
:PRINT 66-PR:GOSUB 5030:CLS#1:LOCATE 20,
25:PRINT CHR$(128):CR=3:GOSUB 4680:GOSUB
 5180
4550 IF INKEY(60)=0 THEN 3160
4560 NEXT
4570 LOCATE 15,22:PEN 2:PRINT "   VILLES
  "
4580 FOR VI=1 TO 80
4590 IF VA$(VI)<>"" THEN PRINT#1,CHR$(30
)+CHR$(24):LOCATE#1,(40-LEN(VA$(VI)))/2,
1:PRINT#1,VA$(VI):PRINT#1,CHR$(30)+CHR$(
24):CV=1:GOSUB 5260:PV=PV+1:LOCATE 15,18
:PRINT 80-PV:GOSUB 5030:CLS#1:LOCATE 20,
25:PRINT CHR$(128):CV=3:GOSUB 5260:GOSUB
 5180
4600 IF INKEY(60)=0 THEN 3160
4610 NEXT
4620 GOTO 3160
4630 MODE 0:A=320:B=390:EC=1:CF=15:GOSUB
 4840
4640 PEN 13:LOCATE 9,6:PRINT NOM$
4650 PEN 14:LOCATE 7,11:PRINT "A BIENTOT
"
4660 GOTO 4660
4670 END
4680 ON RI GOSUB 180,210,230,250,270,290
,310,330,350,370,390,410,440,460,480,500
,520,540,560,580,600,620,640,660,680,700
,720,740,760,780,800,820,840,860,880,900
,920,940,960,980,1000,1020,1040,1510,106
0,1080,1100
4690 IF RI>47 THEN 4700 ELSE 4720
4700 RI2=RI-47
4710 ON RI2 GOSUB 1120,1140,1170,1190,12
10,1230,1250,1270,1290,1310,1330,1350,13
70,1390,1410,1430,1450,1470,1490
4720 RETURN
4730 RESTORE 1530
4740 FOR I=1 TO 66
4750 READ RI$,RX,RY
4760 RI$(I)=RI$:RX(I)=RX:RY(I)=RY
4770 NEXT
4780 RESTORE 2190
4790 FOR I=1 TO 80
4800 READ VI$,VX,VY,RIV$
4810 VI$(I)=VI$:VX(I)=VX:VY(I)=VY:RIV$(I
)=RIV$
4820 NEXT
4830 RETURN
4840 RESTORE 50:PLOT A,B
4850 READ X,Y
4860 IF X=-100 THEN RETURN
4870 DRAWR X*EC,Y*EC,CF
4880 GOTO 4850
4890 MOVE A,B:MOVER RX(RI)*EC,RY(RI)*EC
4900 READ X,Y
4910 IF X=-100 THEN RETURN
4920 DRAWR X*EC,Y*EC,CR
4930 GOTO 4900
4940 C$=INKEY$:IF C$="" THEN 4940
4950 IF ASC(C$)<49 OR ASC(C$)>48+NC THEN
 4940
4960 C=VAL(C$):RETURN
4970 RESTORE 2990
4980 FOR I=1 TO 6
4990 READ BS$,BX,BY,EC,B$,DEBR,FINR,DEBV
,FINV
5000 BS$(I)=BS$:BX(I)=BX:BY(I)=BY:EC(I)=
EC:B$(I)=B$:DEBR(I)=DEBR:FINR(I)=FINR:DE
BV(I)=DEBV:FINV(I)=FINV
5010 NEXT
5020 RETURN
5030 PRINT CHR$(30):PRINT CHR$(7):LOCATE
 20,25:PRINT CHR$(241):CALL &BB06
5040 IF INKEY(60)=0 THEN 3160
5050 RETURN
5060 MODE 1:|MODE01:LOCATE 5,5:PRINT NOM
$:|MODE11:LOCATE 5,10:PRINT "Vous choisi
rez le bassin que vous":LOCATE 1,12:PRIN
T "voulez etudier en appuyant sur la bar
re":LOCATE 1,14:PRINT "d'espace,puis vou
s validerez votre choix"
5070 LOCATE 1,16:PRINT "par ENTER":GOSUB
 5030
5080 RETURN
5090 MODE 1:WINDOW#1,1,40,24,24:PEN#1,0:
PAPER#1,1:BB=0:BS$(7)="SUITE"
5100 BB=BB+1:IF BB>7 THEN BB=BB-7
5110 CLS#1:LOCATE#1,(40-LEN(BS$(BB)))/2,
1:PRINT#1,BS$(BB)
5120 CALL &BB06
5130 IF INKEY(47)=0 THEN 5100
5140 IF INKEY(18)=0 THEN 5160
5150 GOTO 5120
5160 IF BB=7 THEN 3160
5170 RETURN
5180 FOR T=1 TO 1500:NEXT
5190 RETURN
5200 GOSUB 5230
5210 FOR CR=2 TO 6:GOSUB 4680:FOR I=1 TO
 500:NEXT:NEXT:CLS#2
5220 RETURN
5230 WINDOW#2,1,40,1,1:PAPER#2,3:PEN#2,1
5240 CLS#2:LOCATE#2,(40-LEN(RI$(RI)))/2,
1:PRINT#2,RI$(RI)
5250 RETURN
5260 ORIGIN A+VX(VI)*EC,B+VY(VI)*EC
5270 FOR XX=-2*EC TO 2*EC
5280 FOR YY=-2*EC TO 2*EC
5290 PLOT XX,YY,CV
5300 NEXT
5310 NEXT
5320 ORIGIN 0,0
5330 RETURN
5340 WINDOW#2,1,40,1,1:PAPER#2,3:PEN#2,1
5350 CLS#2:LOCATE#2,(40-LEN(VI$(VI)))/2,
1:PRINT#2,VI$(VI)
5360 RETURN
5370 FOR CV=1 TO 10:GOSUB 5260:FOR I=1 T
O 80:NEXT:NEXT:CLS#2
5380 RETURN
5390 MODE 1:LOCATE 5,7:PRINT "Nombre de
joueurs ? (de 1 a 3 )":NC=3:GOSUB 4940
5400 IF C=1 THEN NJ=1:PT(1)=0:JO$(1)=NOM
$:RETURN
5410 NJ=C:FOR JO=1 TO NJ:PT(JO)=0
5420 LOCATE 5,9+JO*2:PRINT "NOM du joueu
r ";JO;:INPUT "",JO$(JO)
5430 IF LEN(JO$(JO))=0 THEN GOTO 5420
5440 IF LEN(JO$(JO))>10 THEN JO$(JO)=LEF
T$(JO$(JO),10)
5450 NEXT:RETURN
5460 RANDOMIZE TIME:FOR J=1 TO JJ:DE(J)=
J:NEXT:DC=0:RETURN
5470 DC=DC+1:IF DC>JJ THEN RETURN
5480 NN=INT(RND*JJ)+1
5490 IF DE(NN)<>0 THEN DE(NN)=0:NU=NN:RE
TURN ELSE NN=NN+1:IF NN>JJ THEN NN=NN-JJ
5500 GOTO 5490
```

BOISSON ASSISTEE PAR ORDINATEUR



Gérard TANNIERE



Alors que notre pays annonce 11 000 tués sur les routes en 1986 et que le doublement des peines, en cas d'accident dû à l'alcool, vient d'être décidé en Conseil des Ministres, il est intéressant d'utiliser l'intransigeance de l'informatique pour aider les bons vivants que nous sommes à boire en connaissance de cause.

BAO doit permettre d'évaluer, à la fin du repas, le taux d'alcoolémie. En fonction de la nature et de l'heure d'absorption, l'ordinateur donnera, non seulement le pourcentage maximum en grammes par litre, mais aussi un message indiquant les effets de l'alcool ingurgité et, le cas échéant, les heures entre lesquelles la conduite est fortement déconseillée, sous peine de se voir verbaliser selon les dernières sanctions réglementaires.

Attention : l'auteur décline toute responsabilité en cas de brouille avec vos amis...

```
10 '**********************************
20 '* Boisson Assistee par Ordinateur *
30 '***        par G. TANNIERE        ***
40 '***          le 02-03-87          ***
50 '***    pour tous les amis qui     ***
60 '***     viennent a la maison      ***
70 '**********************************
80 MODE 0:BORDER 0:INK 1,11:INK 2,26:INK
 3,6:INK 4,18:INK 5,0:PAPER 4:CLS
90 LOCATE 3,7:PEN 1:PRINT "B";:PEN 5:PRI
NT "oisson":LOCATE 6,13:PEN 2:PRINT "A";
:PEN 5:PRINT "ssistee":LOCATE 10,16:PRIN
T"par":LOCATE 9,19:PEN 3:PRINT "O";:PEN
5:PRINT "rdinateur":GOSUB 1000
100 RESTORE 1010:ENV 1,2,2,5,1,0,200:FOR
 x=1 TO 77:READ c,h,d,v:SOUND c,h,d*0.9,
v,1:NEXT
110 CLS:LOCATE 9,6:PRINT "par":LOCATE 8,
12:PRINT "gerard":LOCATE 7,18:PRINT "TAN
NIERE"
120 ph$="ATTENTION. ce programme n'a auc
une valeur juridique.":TAG:FOR x=640 TO
-1000 STEP-20:PLOT x,30,2:PRINT ph$;:NEX
T:TAGOFF:FOR x=1 TO 3000:NEXT:MODE 1:RES
TORE 1070:FOR x=2 TO 20 STEP 2:READ p$:L
OCATE 2,x:PRINT p$:NEXT
130 LOCATE 23,24:PRINT "une touche SVP."
;:WHILE k$<>"":k$=INKEY$:WEND:WHILE k$="
":k$=INKEY$:WEND
140 '*** entree des donnees ***
150 MODE 1:PAPER 2:PEN 1:CLS:BORDER 0:WI
NDOW#1,2,18,2,10:PAPER#1,1:PEN#1,2:CLS#1
:WINDOW#2,2,18,12,24:PAPER#2,1:PEN#2,2:C
LS#2:WINDOW#3,20,39,2,24:PAPER#3,1:PEN#3
,2:CLS#3
160 DIM alc(200),alt(200),fine(200),m(20
0),mal(200):LOCATE#1,2,2:INPUT#1,"NOM:",
nom$
170 LOCATE#1,3,4:INPUT#1,"SEXE :",sex$:s
ex$=UPPER$(sex$):IF sex$<>"F" AND sex$<>
"M" THEN GOTO 170 ELSE IF sex$="F" THEN
coef=0.6 ELSE coef=0.7
180 LOCATE#1,3,6:INPUT#1,"POIDS:",poid$:
poids=VAL(poid$):LOCATE#1,9+LEN(poid$),6
:PRINT#1," kg"
190 LOCATE#1,2,8:INPUT#1,"HEURE: ",hd:LO
CATE#1,8,8:PRINT#1,USING "##.##";hd;:PRI
NT#1," h"
200 LOCATE#3,5,2:PRINT#3,"CONSOMMATIONS"
:RESTORE 1090:FOR x=1 TO 16:READ r$:LOCA
TE#3,2,4+x:PRINT#3,r$:NEXT x
210 '**** ENTREE DES CONSOMMATIONS ****
220 FOR x=0 TO 5:fine(x)=1:NEXT:x=2:h=5:
hg=hd:DEF FNalcool=alt(h-1)+alt(h-2)+alt
(h-3)+alt(h-4)+alc(h-1)+(0.04*(fine(h-5)
=0))
230 WHILE en$<>"FIN"
240 LOCATE#2,2,x:PRINT#2,USING "##.##";h
g:LOCATE#2,10,x:INPUT#2,en$:en$=UPPER$(e
n$):en=VAL(en$)
250 ON en+1 GOSUB 1130,1140,1150,1160,11
70,1180,1190,1200,1210,1220,1230,1240,12
50,1260,1270,1280,1290
260 x=x+2:IF x>13 THEN x=12:PRINT#2,STRI
NG$(2,CHR$(10))
270 malc=MAX(alc(h)):hg=hg+0.15:h=h+1:IF
 (hg-INT(hg))>0.59 THEN hg=INT(hg)+1
280 IF hg>24 THEN hg=0.15
290 WEND:fine(h-1)=0
300 h=4:WHILE alc(h)>=0:h=h+1:alt(h)=(m(
h)/(4*poids*coef)):alc(h)=FNalcool:mal=a
lc(h):IF mal>malc THEN malc=mal
310 IF mal>malc THEN malc=mal
320 WEND
330 '*** sortie du graphique ***
340 MODE 1:PAPER 2:CLS:LOCATE 10,2:PRINT
 "GRAPHE de L'ALCOOLEMIE":cy=100:cx=600\
h:ORIGIN 30,180:DRAW 600,0,1:PLOT 0,-10,
1:DRAW 0,200:PLOT 0,80:DRAW 600,80:FOR y
=0 TO 200 STEP 10:MOVE -6,y:DRAW 0,y:NEX
T
350 PRINT CHR$(23)+CHR$(1);:TAG:PAPER 3:
MOVE -30,200:PRINT "g/l";:MOVE 590,-4:PR
```

```
INT "h";:MOVE -30,96:PRINT "0.8";:TAGOFF
:PRINT CHR$(23)+CHR$(0):h=6:hd=hd+0.15
360 i=0:PLOT 0,0:WHILE alc(h)>=0:PLOT (h
-6)*cx,alc(h-1)*100,0:DRAW (h-5)*cx,alc(
h)*100:IF alc(h)>0.8 AND i=0 THEN hdc=hd
:i=1 ELSE IF alc(h)<0.8 AND i=1 THEN hfc
=hd:i=0
370 IF hd-INT(hd)=0 AND cx>9 THEN PLOT (
h-5)*cx,0,1:DRAW (h-5)*cx,-12:PRINT CHR$
(23)+CHR$(1);:TAG:PLOT 0,0,3:MOVE (h-5)*
cx-32,-16:PRINT INT(hd);:TAGOFF:PRINT CH
R$(23)+CHR$(0) ELSE PLOT (h-5)*cx,0,1:DR
AW (h-5)*cx,-8
380 IF hd-INT(hd)=0 AND cx<=9 AND (INT(h
d)) MOD 4=0 THEN PLOT (h-5)*cx,0,1:DRAW
(h-5)*cx,-12:PRINT CHR$(23)+CHR$(1);:TAG
:PLOT 0,0,3:MOVE (h-5)*cx-32,-16:PRINT I
NT(hd);:TAGOFF:PRINT CHR$(23)+CHR$(0) EL
SE PLOT (h-5)*cx,0,1:DRAW (h-5)*cx,-8
390 h=h+1:hd=hd+0.15:IF (hd-INT(hd))>0.5
9 THEN hd=INT(hd)+1 ELSE IF hd>24 THEN h
d=0.15
400 WEND
410 '*** commentaires du graphe ***
420 WINDOW#4,2,39,17,24:PAPER#4,0:PEN#4,
2:CLS#4
430 LOCATE#4,10,2:IF sex$="F" THEN PRINT
#4,"madame ";UPPER$(nom$) ELSE PRINT#4,"
monsieur ";UPPER$(nom$)
440 LOCATE#4,2,4:PRINT#4,"votre alcoolem
ie maximun est de";USING "##.###";malc:G
OSUB 1390:CLS#4
450 IF malc<0.3 THEN RESTORE 1310:READ p
h$:PRINT#4,CHR$(10);CHR$(10)ph$:GOSUB 13
90
460 IF malc>=0.3 AND malc<0.5 THEN RESTO
RE 1320:READ ph$:PRINT#4,CHR$(10);ph$:GO
SUB 1390
470 IF malc>=0.5 AND malc<0.8 THEN RESTO
RE 1330:READ ph$:PRINT#4,CHR$(10);ph$:GO
SUB 1390
480 IF malc>=0.8 AND malc<1.5 THEN BORDE
R 6:RESTORE 1340:READ ph$:PRINT#4,ph$:LO
CATE#4,12,6:PEN#4,3:PRINT#4,USING "##.##
";hdc;:PRINT#4," H a ";:PRINT#4,USING "#
#.##";hfc;:PRINT#4," H":GOSUB 1390:CLS#4
:READ ph1$:PRINT#4,ph1$:GOSUB 1390
490 IF malc>=1.5 AND malc<3 THEN RESTORE
 1360:READ ph$:PRINT#4,CHR$(10);ph$:LOCA
TE#4,12,5:PEN#4,3:PRINT#4,USING "##.##";
hdc;:PRINT#4," H a ";:PRINT#4,USING "##.
##";hfc;:PRINT#4," H":GOSUB 1390:CLS#4:R
ESTORE 1350:READ ph1$:PRINT#4,ph1$:GOSUB
 1390
500 IF malc>=3 AND malc<5 THEN BORDER 6:
RESTORE 1370:READ ph$:PRINT#4,CHR$(10);p
h$:LOCATE#4,12,5:PEN#4,3:PRINT#4,USING "
##.##";hdc;:PRINT#4," H a ";:PRINT#4,USI
NG "##.##";hfc;:PRINT#4," H":GOSUB 1390:
CLS#4:RESTORE 1350:READ ph1$:PRINT#4,ph1
$:GOSUB 1390
510 IF malc>=5 THEN BORDER 6,0:RESTORE 1
380:READ ph$:PRINT#4,CHR$(10);ph$:LOCATE
#4,12,6:PEN#4,3:PRINT#4,USING "##.##";hd
c;:PRINT#4," H a ";:PRINT#4,USING "##.##
";hfc;:PRINT#4," H":GOSUB 1390:CLS#4:RES
TORE 1350:READ ph1$:PRINT#4,ph1$:GOSUB 1
390
520 CLS#4:LOCATE#4,7,3:PRINT#4,"Voulez v
ous un autre graphe ?":LOCATE#4,15,5:PRI
NT#4,"Oui ou Non":WHILE a$<>"":a$=INKEY$
:WEND:WHILE a$<>"O" AND a$<>"N":a$=UPPER
$(INKEY$):WEND:IF a$="O" THEN RUN 140 EL
SE CALL 0
530 END
1000 '*** boire un petit coup ***
1010 DATA 1,319,30,5,1,319,30,5,1,319,30
,5,1,319,30,5,1,319,30,5,1,319,30,5,1,35
8,30,5,1,358,30,5,1,402,120,5,1,536,60,5
,1,1,60,5,1,253,30,5,1,253,30,5,1,253,30
,5,1,253,30,5,1,213,120,5,1,239,120,5,1,
253,120,5,1,1,60,5,1,253,30,5
1020 DATA 1,253,30,5,1,253,30,5,1,253,30
,5,1,253,90,5,1,253,30,5,1,239,30,5,1,25
3,30,5,1,284,30,5,1,319,30,5,1,253,60,5,
1,284,60,5,1,1,30,5,1,239,30,5,1,239,30,
5,1,239,30,5,1,239,30,5,1,239,30,5,1,239
,30,5,1,253,30,5,1,284,30,5
1030 DATA 1,319,60,5,1,253,60,5,1,379,12
0,5,1,319,30,5,1,319,30,5,1,319,30,5,1,2
53,30,5,1,319,120,5,1,358,120,5,1,379,12
0,5,1,1,60,5,1,253,30,5,1,253,30,5,1,253
,30,5,1,225,60,5,1,1,30,5,1,284,30,5,1,2
84,30,5,1,284,30,5,1,284,60,5
1040 DATA 1,1,30,5,1,225,30,5,1,225,30,5
,1,225,30,5,1,253,60,5,1,1,30,5,1,319,30
,5,1,319,30,5,1,319,30,5,1,319,60,5,1,1,
30,5,1,253,30,5,1,253,30,5,1,284,30,5.1,
319,120,5,1,358,120,5,1,379,120,5
1050 RETURN
1060 '*** data mode d'emploi ***
1070 DATA " Ce programme est destine a e
valuer","votre taux d'alcoolemie.Pour ce
la:","-ENTREZ: NOM-SEXE-POIDS-et HEURE D
E"," DEBUT d'absorption d'alcool:","-VAL
IDEZ a chaque fois par <ENTER>.","-CHOIS
ISSEZ dans la colonne de droite"
1080 DATA " le type d'alcool et ENTREZ l
e nombre"," face a l'heure d'absorption.
","-A la fin du repas ENTREZ le mot FIN"
,"-L'ordinateur se chargera du reste."
1090 '*** listes des consommations ***
1100 DATA 1-45%-2 cl anis,2-45%-6 cl  ",
3-40%-2 cl whisky,4-40%-6 cl   ",5-30%-2
 cl   ",6-30%-6 cl   "
1110 DATA 7-20%-6 cl,8-16%-6 cl vin cuit
,9-12%-12 cl  vin,10-11%-12 cl  ",11-10%
-12 cl  ",12-6%-25 cl biere,13-6%-12 cl
cidre,14-40%-3 cl diges.,15-20%-3 cl liq
ueur,16-10%-12 cl champ.
1120 '*** masse d'alcool par verre ***
1130 m(h)=0:fine(h)=1:RETURN
1140 m(h)=7.2:fine(h)=0:RETURN
1150 m(h)=21.6:fine(h)=0:RETURN
1160 m(h)=6.4:fine(h)=0:RETURN
1170 m(h)=19.2:fine(h)=0:RETURN
1180 m(h)=4.8:fine(h)=0:RETURN
1190 m(h)=14.4:fine(h)=0:RETURN
1200 m(h)=9.6:fine(h)=0:RETURN
1210 m(h)=7.68:fine(h)=0:RETURN
1220 m(h)=11.52:fine(h)=0:RETURN
1230 m(h)=10.56:fine(h)=0:RETURN
1240 m(h)=9.6:fine(h)=0:RETURN
1250 m(h)=12:fine(h)=0:RETURN
1260 m(h)=6:fine(h)=0:RETURN
1270 m(h)=9.5:fine(h)=0:RETURN
1280 m(h)=4.8:fine(h)=0:RETURN
1290 m(h)=9.6:fine(h)=0:RETURN
1300 '*** datas commentaires ***
1310 DATA "    BRAVO... vous etes tres s
age"
1320 DATA " AUCUN troubles apparents mai
s:          votre acuite visuelle diminue
          votre estimation des distances
est    faussee"
1330 DATA "   ATTENTION :
          les troubles apparaissent
        les temps de reaction s'allongen
t      legere euphorie "
1340 DATA " ATTENTION:conduire devient d
angereux        Votre vigilance diminue
              legere ivresse
        reflexes de plus en plus trouble
s       vous ne devez pas conduire de:"
1350 DATA " si controle ou accident vous
 risquez:     -1000 a 30000 frs d'amende
             -2 mois a 2 ans de prison
     + retrait du permis  de 3 ans maxim
un si accident grave ou recidive ou deli
t de fuite: les peines sont doublees."
1360 DATA "DANGER:votre allure devient t
itubante       votre vue se dedouble
      Vous ne devez absolument pas cond
uire      de: "
1370 DATA "   DANGER :
            toute conduite est impossible
         Vous ne devez absolument pas con
duire      de: "
1380 DATA " DANGER :
          vous risquez de sombrer dans un
 coma        pouvant entrainer la mort
      Vous ne devez absolument pas condui
re      de: "
1390 '*** attente touche ***
1400 PEN#4,2:LOCATE#4,23,8:PRINT#4,"une
touche SVP.";:WHILE k$<>"":k$=INKEY$:WEN
D:WHILE k$="":k$=INKEY$:WEND:RETURN
```

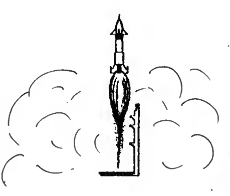
OPERATION OMEGA

Jean-Michel BIEBER



Dans l'espace, personne ne nous entend crier. Aux commandes d'un tout nouvel appareil, votre mission sera de délivrer la planète Oméga de ses tyrans.

Opération Oméga est écrit en Basic, il ne peut donc rivaliser en vitesse avec les programmes Assembleur. Il devrait pourtant intéresser les propriétaires de 664 et 6128. A vos joysticks !



```
10 '********************************
20 '*                              *
30 '*    OPERATION     OMEGA       *
40 '*                              *
50 '*          AMSTRAD             *
60 '*         CPC    6128          *
70 '*                              *
80 '*     (C)  1985 BIB COMPUTEUR  *
90 '*                              *
100 '*******************************
110 MODE 0
120 INK 0,0
130 INK 1,15:INK 2.2:INK 3,14:INK 4,25:B
ORDER 0
140 INK 5,10:INK 6,7:INK 7,6:INK 8,20:GO
SUB 600
150 INK 0,0:PAPER 0
160 FOR t=1 TO 100:PLOT RND*640,RND*400,
4:NEXT
170 GOSUB 930:GOSUB 1060:GOTO 220
180 FOR t=380 TO 400:MOVE 1,t:DRAW 640,t
,2:NEXT
190 FOR t=1 TO 20:MOVE 1,t:DRAW 640,t,2:
NEXT
200 FOR t=1 TO 20:MOVE t,22:DRAW t,400,3
:NEXT
210 FOR t=620 TO 640:MOVE t,1:DRAW t,380
,3:NEXT
220 r=90:g=PI/90:k=0.6
230 a=0.6:b=PI-0.6
240 FOR t=a TO h STEP g
250 f=-PI/2
260 GOSUB 420
270 PLOT x+320,y+190,1
280 FOR f=-PI/2 TO PI/2 STEP k
290 PLOT x+320,y+190,1
300 DRAW x+320,y+190,1
310 NEXT f:NEXT t
320 FOR f=-PI/2+0.4 TO PI/2-0.4 STEP g
330 t=a
340 GOSUB 420
350 PLOT x+320,y+190
360 FOR t=a TO b STEP k
370 GOSUB 420
380 DRAW x+320,y+190,1
390 NEXT
400 NEXT
410 GOTO 480
420 h=45*ABS(COS(t*8)*COS(f*8)*SIN(t*5)*
COS(f*5))
430 IF h>5 THEN h=10-h
440 h=h+r
450 x=h*COS(f)*COS(t)*1.4
460 y=h*SIN(f)
470 RETURN
480 MOVE 210,200:DRAW 150,160,2:DRAW 450
,240,3
490 MOVE 210,200:DRAW 150,160,2:DRAW 450
,240,3
500 MOVE 465,242:DRAW 475,244,5
510 PLOT 465,248,1:PLOT 470,252,1:PLOT 4
70,250,1
520 MOVE 460,244:DRAW 480,250,4
530 DATA 112,97,114,32,32,74,77,32,66,73
,69,66,69,82
540 INK 10,19:PEN 10:LOCATE 16,15:PRINT
CHR$(236)+CHR$(237)
550 x=3:y=370:PEN 8:FOR t=0 TO 13:MOVE 5
30,170:DRAW 570,y,3:MOVE 530,170:DRAW 57
0,y,0:READ a:GOSUB 1000:LOCATE 19,x:PRIN
T CHR$(a):FOR k=1 TO 500:NEXT k:x=x+1:y=
y-18:NEXT
560 PEN 0:LOCATE 16,15:PRINT CHR$(236)+C
HR$(237)
570 LOCATE 5,24:PEN 2:PRINT"CHARGEMENT..
."
580 RUN"OMEGA"
590 END
600 '*********************
610 '*  ALPHABET GENERE.  *
620 '*********************
630 SYMBOL AFTER 64
640 SYMBOL 67,120,120,96,96,96,126,126,0
```

```
650 SYMBOL 65,14,30,54,102,126,102,102,0
660 SYMBOL 66,112,104,104,120,108,102,12
6,0
670 SYMBOL 68,112,120,108,102,102,126,12
4,0
680 SYMBOL 69,112,96,120,120,96,124,126,
0
690 SYMBOL 70,126,102,96,120,112,96,96,0
700 SYMBOL 71,126,102,102,96,110,102,126
,0
710 SYMBOL 72,68,100,102,126,126,102,102
,0
720 SYMBOL 73,16,24,24,24,24,24,24,0
730 SYMBOL 74,2,6,6,6,6,102,126,0
740 SYMBOL 75,98,102,104,112,104,102,102
,0
750 SYMBOL 76,64,96,96,96,96,126,126,0
760 SYMBOL 77,66,102,126,90,66,102,102,0
770 SYMBOL 78,66,102,118,126,102,102,102
,0
780 SYMBOL 79,120,108,102,102,102,126,12
6,0
790 SYMBOL 80,120,124,100,124,96,96,96,0
800 SYMBOL 81,124,126,66,66,78,126,126,0
810 SYMBOL 82,120,100,100,120,104,102,10
2,0
820 SYMBOL 83,60,108,96,56,12,102,124,0
830 SYMBOL 84,126,126,24,24,24,24,12,0
840 SYMBOL 85,68,102,102,102,102,126,124
,0
850 SYMBOL 86,102,102,36,36,24,24,24,0
860 SYMBOL 87,102,102,66,66,90,102,66,0
870 SYMBOL 88,102,102,36,24,24,102,102,0
880 SYMBOL 236,30,18,51,64,158,192,63,45
890 SYMBOL 237,0,0,0,128,64,192,0,0
900 SYMBOL 90,126,118,6,28,48,102,126,0
910 RETURN
920 '
930 '
940 PEN 5:LOCATE 7,3:PRINT"BIB"
950 PEN 6:LOCATE 7,5:PRINT"COMPUTEUR"
960 PEN 5:LOCATE 7,7:PRINT"PRESENTE"
970 PEN 7:LOCATE 3,22:PRINT"OPERATION--O
MEGA"
980 RETURN
990 ' son
1000 ENV 2,10,-1,5,5,-1,4
1010 ENT -2,80,1,1,20,2,1
1020 FOR m=1 TO 6
1030 SOUND 4,50,10,15,2,5,10
1040 NEXT m
1050 RETURN
1060 INK 10,1:INK 9,26
1070 FOR t=1 TO 5:MOVE 30,t:DRAW 610,t,1
0:NEXT
1080 FOR t=6 TO 20:MOVE 30,t:DRAW 610,t,
2:NEXT
1090 FOR t=20 TO 22:MOVE 30,t:DRAW 610,t
,9:NEXT
```

```
1100 FOR t=1 TO 8:MOVE t,26:DRAW t,374,1
0:NEXT
1110 FOR t=8 TO 20:MOVE t,26:DRAW t,374,
2:NEXT
1120 FOR t=20 TO 22:MOVE t,26:DRAW t,374
,9:NEXT
1130 FOR t=616 TO 620:MOVE t,26:DRAW t,3
74,9:NEXT
1140 FOR t=620 TO 632:MOVE t,26:DRAW t,3
74,2:NEXT
1150 FOR t=632 TO 636:MOVE t,26:DRAW t,3
74,10:NEXT
1160 FOR t=394 TO 400:MOVE 30,t:DRAW 610
,t,10:NEXT
1170 FOR t=382 TO 392:MOVE 30,t:DRAW 610
,t,2:NEXT
1180 FOR t=378 TO 380:MOVE 30,t:DRAW 610
,t,9:NEXT
1190 x=20:FOR t=1 TO 22:MOVE t,x:DRAW t,
20,10:x=x-1:NEXT t
1200 x=380:FOR t=1 TO 22:MOVE t,x:DRAW t
,380,10:x=x+1:NEXT t
1210 x=380:FOR t=618 TO 636:MOVE t,380:D
RAW 618,x,10:x=x+1:NEXT t
1220 x=1:FOR t=618 TO 636:MOVE t,20:DRAW
 t,x,10:x=x+1:NEXT t
1230 RETURN
```

```
5 DEFINT a-z
7 PEN 0:LOCATE 5,24:PRINT"CHARGEMENT..."
10 FOR i=30 TO 600 STEP 2:MOVE i,30:DRAW
 i,370,0:NEXT i
12 GOSUB 4500
15 SYMBOL AFTER 60:GOSUB 3870
20 ENV 5,1,15,1,1,-2,1,1,0,2,12,-1,8,2,-
1,20:ENT -1,1,0,3,1,-1,1,1,0,2,1,0,1,1,1
,1
40 CLS:INK 0,0:INK 1,2:INK 3,6:PAPER 0
55 INK 15,2,0:PEN 15:LOCATE 4,10:PRINT"U
N INSTANT SVP"
80 GOSUB 3380
90 GOSUB 2620
95 DIM N$(10)
97 DIM S(10)
98 FOR U=1 TO 10:S(U)=0:N$(U)="PERSONNE"
:NEXT U
100 FOR I=1 TO 14:INK 1,0:NEXT I:GOSUB 2
890
101 INK 14,0:PEN 0:LOCATE 4,10:PRINT"UN
INSTANT SVP"
102 INK 0,0:INK 1,2:INK 3,6:PAPER 0
103 SPEED INK 10,10:INK 7,18,3
105 INK 2,23:INK 4,10:BORDER 0:INK 5,24
107 INK 6,15
125 FOR k=1 TO 200:NEXT k:FOR k=1 TO 3:S
OUND 1,20,30,15,5,1:FOR l=1 TO 800:NEXT
l:NEXT k
130 z1$=CHR$(225)+CHR$(226)
140 z2$=CHR$(227)+CHR$(228)+CHR$(229)
150 z3$=CHR$(230)+CHR$(231)+CHR$(232)
160 z4$=CHR$(233)+CHR$(234)+CHR$(235)
170 z5$=CHR$(236)+CHR$(237)
180 z6$=CHR$(238)+CHR$(239)+CHR$(240)
190 z7$=CHR$(241)+CHR$(242)+CHR$(243)
200 z8$=CHR$(244)
240 sc=0
245 vi=3
250 rc=2:wp=1
260 tb=1:s=10:TP=0
270 a=1:c=5
275 TBJ=0
280 ch=0
290 B1=244
300 v=19:t=5
310 w=v:x=0
320 b=10:ct=0
330 q=320:ca=0
340 ts=0
345 GOSUB 3360
350 '**************************
360 '*                        *
370 '*    PRG  PRINCIPAL      *
380 '*                        *
390 '**************************
400 PEN 1:LOCATE a,b:PRINT z1$
410 J=JOY(0)
420 IF t>20 THEN t=10
430 IF J=16 THEN MOVE 100,B1:DRAW 600,B1
,0:DRAW 100,B1,2:DRAW 600,B1,2:DRAW 100,
B1,0:GOSUB 2420
440 IF J=1 THEN GOTO 450:ELSE IF J=2 THE
N GOTO 460:ELSE GOTO 470
450 IF B<=5 THEN GOTO 470:ELSE PEN 0:LOC
ATE A,B:PRINT Z1$:B=B-1:B1=B1+18:PEN 1:L
OCATE A,B:PRINT Z1$:GOTO 470
460 IF B>=14 THEN GOTO 470:ELSE PEN 0:LO
CATE A,B:PRINT Z1$:B=B+1:B1=B1-18:LOCATE
 A,B:PEN 1:PRINT Z1$
470 IF CA=1 THEN GOSUB 950:GOTO 410
480 IF x=0 THEN o1=INT(RND*10)+5:x=1:w=1
9
490 ON TB GOSUB 560,710,890,1040
500 GOTO 400
510 '******************************
520 '*                            *
530 '*          NIVEAU 1          *
540 '*                            *
550 '******************************
560 '
570 o=INT(RND*10)+5
580 IF ct=8 THEN tb=2:v=19:t=10:ct=0:s=2
0:X=1:PEN 0:LOCATE w,o1:PRINT " -":FOR k
=1 TO 3:SOUND 1,20,30,15,5,1:FOR l=1 TO
800:NEXT l:NEXT k:INK 7,18:RETURN
590 IF w=1 THEN PEN 0:LOCATE w,o1:PRINT
CHR$(202)+" ":x=0:ELSE PEN 7:LOCATE w,o1
:PRINT CHR$(202)+" ":w=w-1
```

```
600 IF v=1 AND b=t THEN vi=vi-1:GOSUB 33
00:GOSUB 2510:GOSUB 3320:v=19:t=5
610 IF w=1 AND b=o1 THEN LOCATE v,t:PEN
0:PRINT z2$:vi=vi-1:GOSUB 3300:GOSUB 251
0:GOSUB 3320:w=19:o1=INT(RND*10)+5:t=5:v
=19
620 LOCATE v,t:PEN 0:PRINT z2$:IF t>=o T
HEN GOTO 640:ELSE t=t+1
630 SOUND 1,500+t*10,10
640 IF v=1 THEN SOUND 1,20,10:PEN 0:LOCA
TE v,t:PRINT z2$:v=19:t=5:RETURN:ELSE v=
v-1:PEN 5:LOCATE v,t:PRINT z2$
650 RETURN
660 '******************************
670 '*                            *
680 '*         2 TABLEAU          *
690 '*                            *
700 '******************************
710 '
720 IF CT=5 THEN VI=VI+1:TB=3:CT=0:s=30:
LOCATE v,t:PEN 0:PRINT z3$:v=19:t=INT(RN
D*10)+5:GOSUB 3050:RETURN
730 IF ch=1 THEN GOTO 790
740 IF v<=1 AND b=t THEN vi=vi-1:GOSUB 3
320:GOSUB 3350:GOSUB 3300:GOSUB 2510:v=1
9:t=10
750 LOCATE v,t:PEN 0:PRINT z3$
760 IF v=1 THEN SOUND 1,20,10:PEN 0:LOCA
TE v,t:PRINT z3$:v=19:t=INT(RND*10)+5:RE
TURN:ELSE v=v-1:PEN 5:LOCATE v,t:PRINT z
3$
770 IF v=18 OR v=14 OR v=10 OR v=8 THEN
LOCATE v,t:PEN 1:PRINT z3$
780 RETURN
790 PEN 0:LOCATE v,t:PRINT z8$:v=v-2
800  IF v<=2 AND b=t THEN vi=vi-1:GOSUB
3320:GOSUB 3300:GOSUB 2510:v=19:t=10:ch=
0:
810 LOCATE v,t:PEN 7:PRINT z8$
820 IF v=1 OR v=2 THEN ch=0:PEN 0:LOCATE
 v,t:PRINT z8$:v=19:t=10
830 RETURN
840 '******************************
850 '*                            *
860 '*         3 tableau          *
870 '*                            *
880 '******************************
890 '
900 IF ct=8 THEN ct=0:s=40:tb=4:t=INT(RN
D*10)+5:GOSUB 3050:v=1:RETURN
910 LOCATE v,t:PEN 0:PRINT z4$
920 IF v<=1 THEN SOUND 1,20,10:PEN 0:LOC
ATE v,t:PRINT z4$:v=19:t=INT(RND*10)+5:R
ETURN:ELSE v=v-1:PEN 5:LOCATE v,t:PRINT
z4$
930 IF v=18 OR v=14 OR v=10 OR v=8 THEN
LOCATE v,t:PEN 1:PRINT z4$:ELSE RETURN
940 v1=v-2:ca=1
950 v1=v1-1:PEN 3:LOCATE v1,t:PRINT z8$+
" "
960 IF v1=1 THEN PEN 0:LOCATE v1,t:PRINT
 z8$:ca=0
970 IF b=t AND v1<=2 THEN LOCATE v,t:PEN
 0:PRINT z3$:v=19:t=10:ca=0:vi=vi-1:GOSU
B 3320:GOSUB 2510
980 RETURN
990 ' ******************************
1000 '*                           *
1010 '*        4 tableau          *
1020 '*                           *
1030 '******************************
1040 '
1050 IF ct=8 THEN GOTO 1100:RETURN
1060 IF v=19 THEN SOUND 1,20,10:PEN 0:LO
CATE v,t:PRINT z5$:v=1:t=INT(RND*10)+5:R
ETURN
1070 LOCATE v,t:PEN 0:PRINT z5$:v=v+1:t=
INT(RND*10)+5:PEN 6:LOCATE v,t:PRINT z5$
:SOUND 1,t*10,15
1080 IF v=2 AND b=t THEN vi=vi-1:SOUND 1
,200,30,15:GOSUB 3320:GOSUB 2510
1090 RETURN
1100 '******************************
1110 '*                           *
1120 '*    PASSAGE AU TABLEAU     *
1130 '*        SUPERIEUR          *
1140 '*                           *
1150 '******************************
1160 FOR T=0 TO 640:MOVE T,64:DRAW T,180
,0:NEXT T
1170 tb=1:s=10
1175 V=19:T=5
1180 w=v:ct=0
1185 TP=TP+1
1186 IF TP=1 THEN INK 5,7:ELSE IF TP=2 T
HEN INK 5,18:ELSE IF TP=3 THEN INK 5,13:
ELSE IF TP=4 THEN TP=0:INK 5,0
1190 ts=ts+1:ON ts GOSUB 3750
1200 GRAPHICS PEN 1:TAG:MOVE 526,30:PRIN
T vi;:TAGOFF
1210 IF vi<>0 THEN GOTO 360
1215 '***************************
1217 '*                         *
1220 '* FIN JEU / ENTRE DU NOM  *
1222 '*                         *
1225 '***************************
1230 '
1240 LOCATE 2,13:INK 11,22,0:PEN 11:PRIN
T"G A M E  -  O V E R":FOR T=1 TO 3000:N
EXT T:INK 11,22
1250 FOR J=1 TO 2000:NEXT J
1260 INK 0,0:INK 1,11:INK 2,14:INK 3,6
1270 MODE 1:BORDER 0
1280 PEN 3:LOCATE 2,3:PRINT"SELECTIONNEZ
 VOTRE NOM AVEC LA MANETTE"
1290 LOCATE 10,7:PRINT"PUIS TIREZ POUR V
ALIDER"
1300 LOCATE 5,5:PEN 2:PRINT"<-----------
--    ------------->":PEN 1
1310 CR=65:A$=CHR$(CR)
1320 b$=""
1330 FOR u=1 TO 40:LOCATE u,1:PRINT CHR$
(127):NEXT u
1340 FOR u=1 TO 40:LOCATE u,24:PRINT CHR
$(127):NEXT u
1350 FOR u=2 TO 23:LOCATE 1,u:PRINT CHR$
(127):NEXT u
1360 FOR u=2 TO 23:LOCATE 40,u:PRINT CHR
$(127):NEXT u
1370 PEN 2
1380 TAG:MOVE 310,210:GRAPHICS PEN 2:PRI
NT" ";:MOVE 310,210:PRINT A$;:TAGOFF
1390 J=JOY(0)
1400 IF J=8 THEN CR=CR+1
1410 IF J=4 THEN CR=CR-1
1420 IF cr>93 THEN cr=65:ELSE IF cr<65 T
HEN cr=93
1430 A$=CHR$(CR)
1440 TAG:MOVE 310,210:PRINT" ";:MOVE 310
,210:PRINT A$;:TAGOFF
1450 IF j=16 AND cr=91 THEN a$=CHR$(46)
1460 IF j=16 AND cr=92 THEN GOTO 1461:EL
SE GOTO 1470
1461 IF LEN(b$)>0 THEN b$=LEFT$(b$,LEN(b
$)-1):a$="":LOCATE 14,17:PRINT"
       ":LOCATE 14,17:PRINT b$:ELSE b$="
"
1470 IF j=16 AND cr=93 THEN N$=B$:GOTO 1
510
1480 IF J=16 THEN b$=b$+a$:LOCATE 14,17:
PRINT b$
1490 FOR t=1 TO 300:NEXT t
1500 IF LEN(b$)=15 THEN n$=b$:ELSE GOTO
1390
1510 IF SC<=S(10) THEN LOCATE 5,20:PRINT
"PAS DE MEILLEUR SCORE":FOR T=1 TO 5000:
NEXT T:GOTO 1620
1520 IF sc>s(1) THEN s(10)=s(9):s(9)=s(8
):s(8)=s(7):s(7)=s(6):s(6)=s(5):s(5)=s(4
):s(4)=s(3):s(3)=s(2):s(2)=s(1):s(1)=sc:
GOSUB 1720:GOTO 1620
1530 IF sc>s(2) THEN s(10)=s(9):s(9)=s(8
):s(8)=s(7):s(7)=s(6):s(6)=s(5):s(5)=s(4
):s(4)=s(3):s(3)=s(2):s(2)=sc:GOSUB 1730
:GOTO 1620
1540 IF sc>s(3) THEN s(10)=s(9):s(9)=s(8
):s(8)=s(7):s(7)=s(6):s(6)=s(5):s(5)=s(4
):s(4)=s(3):s(3)=sc:GOSUB 1740:GOTO 1620
1550 IF sc>s(4) THEN s(10)=s(9):s(9)=s(8
):s(8)=s(7):s(7)=s(6):s(6)=s(5):s(5)=s(4
):s(4)=sc:GOSUB 1750:GOTO 1620
1560 IF sc>s(5) THEN s(10)=s(9):s(9)=s(8
):s(8)=s(7):s(7)=s(6):s(6)=s(5):s(5)=sc:
GOSUB 1760:GOTO 1620
1570 IF sc>s(6) THEN s(10)=s(9):s(9)=s(8
):s(8)=s(7):s(7)=s(6):s(6)=sc:GOSUB 1770
:GOTO 1620
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1580 IF sc>s(7) THEN s(10)=s(9):s(9)=s(8
):s(8)=s(7):s(7)=sc:GOSUB 1780:GOTO 1620
1590 IF sc>s(8) THEN s(10)=s(9):s(9)=s(8
):s(8)=sc:GOSUB 1790:GOTO 1620
1600 IF sc>s(9) THEN s(10)=s(9):s(9)=sc:
GOSUB 1610:GOTO 1620
1610 s(10)=sc:n$(10)=n$
1620 MODE 1
1630 FOR u=5 TO 35:LOCATE u,20:PRINT CHR
$(127):NEXT u
1640 FOR u=5 TO 35:LOCATE u,5:PRINT CHR$
(127):NEXT u
1650 FOR u=5 TO 19:LOCATE 5,u:PRINT CHR$
(127):NEXT u
1660 FOR u=5 TO 19:LOCATE 35,u:PRINT CHR
$(127):NEXT u
1670 c=1:FOR t=8 TO 17:LOCATE 6,t:PEN 2:
PRINT s(c):LOCATE 12,t:PEN 1:PRINT".....
..":LOCATE 19,t:PEN 3:PRINT n$(c):c=c+1:
NEXT t
1680 b$="":sc=0
1690 PEN 3:LOCATE 5,23:PRINT"VOULEZ-VOUS
 REJOUER O/N"
1700 Z$=UPPER$(INKEY$):IF Z$="" THEN GOT
O 1700
1710 IF Z$="O" THEN MODE 0:GOTO 100:ELSE
 IF Z$="N" THEN END:ELSE GOTO 1700
1720 n$(10)=n$(9):n$(9)=n$(8):n$(8)=n$(7
):n$(7)=n$(6):n$(6)=n$(5):n$(5)=n$(4):n$
(4)=n$(3):n$(3)=n$(2):n$(2)=n$(1):n$(1)=
n$:RETURN
1730 n$(10)=n$(9):n$(9)=n$(8):n$(8)=n$(7
):n$(7)=n$(6):n$(6)=n$(5):n$(5)=n$(4):n$
(4)=n$(3):n$(3)=n$(2):n$(2)=n$:RETURN
1740 n$(10)=n$(9):n$(9)=n$(8):n$(8)=n$(7
):n$(7)=n$(6):n$(6)=n$(5):n$(5)=n$(4):n$
(4)=n$(3):n$(3)=n$:RETURN
1750 n$(10)=n$(9):n$(9)=n$(8):n$(8)=n$(7
):n$(7)=n$(6):n$(6)=n$(5):n$(5)=n$(4):n$
(4)=n$:RETURN
1760 n$(10)=n$(9):n$(9)=n$(8):n$(8)=n$(7
):n$(7)=n$(6):n$(6)=n$(5):n$(5)=n$:RETUR
N
1770 n$(10)=n$(9):n$(9)=n$(8):n$(8)=n$(7
):n$(7)=n$(6):n$(6)=n$:RETURN
1780 n$(10)=n$(9):n$(9)=n$(8):n$(8)=n$(7
):n$(7)=n$:RETURN
1790 n$(10)=n$(9):n$(9)=n$(8):n$(8)=n$:R
ETURN
1800 n$(10)=n$(9):n$(9)=n$:RETURN
1810 '******************************
1820 '*                            *
1830 '*      PLEIN CARBURANT       *
1840 '*                            *
1850 '******************************
1860 PEN 0:FOR I=0 TO 640 STEP 2:MOVE I,
64:DRAW I,180,0:NEXT I:PEN 1
1870 DATA 1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,
1,1,1,1,1
1880 DATA 2,2,2,2,2,2,3,1,1,1,1,1,1,1,1,
1,1,1,1,1
1890 DATA 0,0,0,0,0,9,5,1,1,1,1,1,1,1,1,
1,1,1,1,1
1900 DATA 10,10,10,10,10,0,5,1,1,1,1,1,1
,1,1,1,1,1,1,1
1910 DATA 10,10,10,10,10,0,5,1,1,1,1,1,1
,1,1,10,10,10,10,1
1920 DATA 10,0,0,0,0,9,5,1,1,1,1,10,10,2
,2,0,0,0,5,1
1930 DATA 10,0,0,4,4,4,6,10,10,2,2,0,0,0
,0,0,9,0,5,1
1940 DATA 10,0,0,0,0,0,0,0,0,0,0,9,0,4,4
,10,10,0,5,1
1950 DATA 10,0,0,4,4,4,4,4,4,4,6,10,10,1
,1,1,10,0,5,1
1960 DATA 10,10,10,1,1,1,1,1,1,1,1,1,1,1
,1,10,10,0,5,1
1970 DATA 1,1,1,1,1,1,1,1,1,1,1,7,2,2,2,
0,0,0,5,1
1980 DATA 1,10,10,10,10,10,10,1,1,1,1,8,
0,0,0,0,0,9,5,1
1990 DATA 10,0,9,0,0,0,0,2,2,10,10,8,0,1
0,10,10,10,10,10,1
2000 DATA 10,0,0,4,4,0,9,0,0,0,0,0,0,10,
1,1,1,1,1,1
2010 DATA 10,0,0,10,1,10,10,4,4,4,4,4,4,
10,1,1,1,1,1,1
2020 DATA 10,0,0,10,1,1,1,1,1,1,1,1,1,1,
1,1,1,1,1,1
2030 HAUT=5
2040 RESTORE 1870:FOR I=1 TO 16
2050 INK 10,30:PEN 3
2060 FOR I=1 TO 20
2070 READ A
2080 IF A=6 THEN MOT$=CHR$(142)
2090 IF A=5 THEN MOT$=CHR$(217)
2100 IF A=7 THEN MOT$=CHR$(135)
2110 IF A=4 THEN MOT$=CHR$(218)
2120 IF A=1 THEN MOT$=CHR$(207)
2130 IF A=8 THEN MOT$=CHR$(219)
2140 IF A=0 THEN MOT$=CHR$(32)
2150 IF A=2 THEN MOT$=CHR$(216)
2160 IF A=3 THEN MOT$=CHR$(139)
2170 IF A=10 THEN MOT$=CHR$(215)
2175 IF a=9 THEN mot$=CHR$(96):PEN 4.
2180 LOCATE I,HAUT:PRINT MOT$
2185 PEN 3
2190 NEXT I
2200 HAUT=HAUT+1
2210 NEXT 1
2220 x=10:y=305:INK 11,11:INK 12,26
2240 M=0:Y1=0
2250 INK 13,2,6:INK 14,6,2
2260 TAG:GRAPHICS PEN 2:MOVE x,y:PRINT C
HR$(95);:TAGOFF
2270 j=JOY(0)
2275 IF x<9 THEN x=9:ELSE IF y<110 THEN
GOTO 2365
2280 ON j GOTO 2300,2310,2340,2320,2340,
2340,2340,2330
2290 IF m=0 THEN x1=2:GOTO 2340:ELSE IF
m=1 THEN x1=-2:GOTO 2340:ELSE GOTO 2340
2300 IF TEST(X-4,Y)<>0 OR TEST(X+30,Y)<>
0 THEN GOTO 2352:ELSE y1=1:X1=0:m=2:GOTO
 2340
2310 IF TEST(X-4,Y-16)<>0 OR TEST(X+30,Y
-16)<>0 THEN GOTO 2353:ELSE y1=-1:X1=0:m
=2:GOTO 2340
2320 x1=-2:y1=0:m=1:GOTO 2340
2330 x1=2:y1=0:m=0:GOTO 2340
2340 TAG:GRAPHICS PEN 2:MOVE x,y:PRINT"
";:x=x+x1:y=y+y1:MOVE x,y:PRINT CHR$(95)
;:TAGOFF
2349 IF TEST(x-4,y+2)<>0 OR TEST(x-4,y-1
4)<>0 THEN GOTO 2352
2350 IF TEST(X+30,Y+2)<>0 OR TEST(x+30,y
-14)<>0 THEN GOTO 2352
2351 GOTO 2270
2352 IF TEST(X-4,Y+2)=3 OR TEST(X+30,Y+2
)=3 THEN GOTO 2358:ELSE GOTO 2359
2353 IF TEST(X-4,Y-16)=3 OR TEST(X+30,Y-
16)=3 THEN GOTO 2358:ELSE GOTO 2359
2354 IF TEST(X+30,Y+2)<>0 OR TEST(x+30,y
-16)<>0 THEN GOTO 2358:ELSE GOTO 2359
2355 IF TEST(x-4,y+2)=3 OR TEST(x-4,y-14
)=3 THEN GOTO 2358:ELSE GOTO 2359
2358 GOSUB 3250:TAG:FOR t=1 TO 3:FOR o=1
 TO 3:GRAPHICS PEN 5:MOVE x,y:a=96+o:PRI
NT CHR$(a);:FOR i=1 TO 200:NEXT i:GRAPHI
CS PEN 0:MOVE x,y:PRINT CHR$(a);:NEXT o:
NEXT t:TAGOFF:GOTO 2365
2359 SOUND 1,20,20,15,1,1,12:sc=sc+1:GOS
UB 3370:GOTO 2270
2365 b1=244:c=5:a=1:b=10:v=19:t=5:x=0:GO
SUB 3210:FOR i=2 TO 10:LOCATE i,2:PEN 6:
SOUND 1,400,15:PRINT CHR$(207):NEXT i
2367 Q=320:PEN 0:FOR I=0 TO 640 STEP 2:M
OVE I,64:DRAW I,340,0:NEXT I:PEN 1
2368 IF tbj=1 THEN tbj=0:GOSUB 3750:RETU
RN
2369 GOSUB 3100:tbj=1:RETURN
2370 '******************************
2380 '*                            *
2390 '*      DIVERS SOUS/PRG       *
2400 '*                            *
2410 '******************************
2420 q=q-8:IF q<46 THEN GOTO 1840:ELSE M
OVE q,368:DRAW q,382,0:MOVE q+4,368:DRAW
 q+4,382,0
2430 IF b<>t THEN FOR n=1 TO 100:SOUND 1
29,15:NEXT:RETURN
2435 IF b=5 THEN RETURN
2440 FOR n=1 TO 100:SOUND 129,15:NEXT n
2450 GOSUB 3250:FOR H=1 TO 5:LOCATE V,T:
PEN H:PRINT Z6$:PEN H-1:LOCATE V,T:PRINT
 Z7$:FOR Y=1 TO 100:NEXT Y:NEXT H
2460 PEN 0:LOCATE V,T:PRINT Z6$:LOCATE V
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,T:PRINT Z7$
2470 ct=ct+1:sc=sc+s:GOSUB 3320:IF tb=1
THEN v=19:t=5
2475 IF tb=4 THEN v=1
2480 ch=1:RETURN
2490 '*************************
2492 '*                       *
2495 '*    explosion vaisseau   *
2497 '*                       *
2500 '*************************
2510 LOCATE a,b:PEN 3:PRINT CHR$(203)+CH
R$(203)+" ":GOSUB 3250:FOR j=1 TO 400:NE
XT j
2520 LOCATE a,b:PRINT CHR$(197)+CHR$(199
):GOSUB 3280
2530 FOR j=1 TO 500:NEXT j
2540 LOCATE a,b:PRINT "  "
2550 RETURN
2560 '******************************
2570 '*                            *
2580 '*          CREATION          *
2590 '*       DES CARACTERES       *
2600 '*                            *
2610 '******************************
2620 '
2625 SYMBOL 217,15,15,15,15,15,15,15,15
2627 SYMBOL 219,240,240,240,240,240,240,
240,240
2630 SYMBOL 225,128,193,255,248,63,3,0,0
2640 SYMBOL 226,224,240,254,7,254,248,96
,0
2650 SYMBOL 227,0,0,0,1,2,31,7,0
2660 SYMBOL 228,3,5,233,17,3,252,16,120
2670 SYMBOL 229,192,128,0,0,0,0,0,0
2680 SYMBOL 230,1,3,12,31,15,7,3,0
2690 SYMBOL 231,192,192,95,210,242,223,1
92,0
2700 SYMBOL 232,64,128,128,0,0,128,128,6
4
2710 SYMBOL 233,7,124,12,27,27,12,124,7
2720 SYMBOL 234,224,63,26,245,250,21,63,
224
2730 SYMBOL 235,0,0,128,128,128,128,0,0
2740 SYMBOL 236,30,18,51,64,158,192,63,4
5
2750 SYMBOL 237,0,0,0,128,64,192,0,0
2760 SYMBOL 238,8,64,4,8,64,16,13,64
2770 SYMBOL 239,16,65,8,32,0,68,4,3
2780 SYMBOL 240,0,0,0,128,0,64,0,0
2790 SYMBOL 241,49,14,32,17,36,64,8,17
2800 SYMBOL 242,0,8,3,72,0,129,24,32
2810 SYMBOL 243,0,128,0,0,0,0,128,0
2820 SYMBOL 244,0,0,48,120,255,124,48,0
2830 SYMBOL 245,0,120,72,254,224,255,56,
0
2840 SYMBOL 246,0,0,0,0,31,0,0,0
2850 SYMBOL 216,255,255,255,255,0,0,0,0
2860 SYMBOL 218,0,0,0,0,255,255,255,255
2870 SYMBOL 215,255,255,255,255,255,255,
255,255
2880 RETURN
2890 GRAPHICS PEN 3:GOSUB 3120:x=352:x1=
398:FOR t=1 TO 18:MOVE t,x:DRAW t,x1,1:x
=x+0.5:x1=x1-0.5:NEXT:MOVE 1,350:DRAW 64
0,350,1
2900 x=352:x1=398:FOR t=640 TO 622 STEP
-1:MOVE t,x:DRAW t,x1,1:x=x+0.5:x1=x1-0.
5:NEXT
2910 x=2:x1=636:FOR t=398 TO 390 STEP -1
:MOVE x,t:DRAW x1,t,2:x=x+2:x1=x1-2:NEXT
2920 x=2:x1=636:FOR t=350 TO 360:MOVE x,
t:DRAW x1,t,2:x=x+2:x1=x1-2:NEXT
2930 MOVE 1,350:DRAW 640,350,1
2940 MOVE 1,398:DRAW 640,398,1
2950 TAG:GRAPHICS PEN 3:MOVE 360,382:PRI
NT"ENERGIE";:TAGOFF
2960 x=1:x1=50:FOR t=1 TO 18:MOVE t,x:DR
AW t,x1,1:x=x+0.5:x1=x1-0.5:NEXT:MOVE 1,
350:DRAW 640,350,1
2970 x=1:x1=50:FOR t=640 TO 622 STEP -1:
MOVE t,x:DRAW t,x1,1:x=x+0.5:x1=x1-0.5:N
EXT
2980 x=2:x1=636:FOR t=50 TO 40 STEP -1:M
OVE x,t:DRAW x1,t,2:x=x+2:x1=x1-2:NEXT
2990 x=2:x1=636:FOR t=1 TO 10:MOVE x,t:D
RAW x1,t,2:x=x+2:x1=x1-2:NEXT
3000 MOVE 1,52:DRAW 640,52,1
3010 MOVE 1,0:DRAW 640,0,1
3020 TAG:GRAPHICS PEN 3:MOVE 30,30:PRINT
"SCORE:";:TAGOFF
3030 TAG:MOVE 390,30:PRINT"VIES:";:TAGOF
F
3040 FOR i=2 TO 10:LOCATE i,2:PEN 6:SOUN
D 1,400,15:PRINT CHR$(207):NEXT i
3050 'FOR k=1 TO 200:NEXT k:FOR k=1 TO 3
:SOUND 1,20,30,15,5,1:FOR l=1 TO 800:NEX
T l:NEXT k
3060 RETURN
3070 '****************************
3080 '*                          *
3090 '*          DECORS          *
3100 '*                          *
3110 '****************************
3120 FOR I=1 TO 640 STEP 2:MOVE I,70:DRA
W i,RND*105+70,4
3125 NEXT i
3140 RETURN
3150 '************************
3160 '*                      *
3170 '*       explosion      *
3180 '*                      *
3190 '************************
3200 LOCATE a,b:PEN 0:PRINT z1$
3210 FOR n=1 TO 35:SOUND 1,n+40,n
3220 SOUND 4,60-n,n
3230 SOUND 2,n+30,1:NEXT
3240 RETURN
3250 FOR j=15 TO 1 STEP -1:SOUND 2,0,15,
j,0,0,1:NEXT j
3260 RETURN
3280 ENV 2,10,-1,8,5,-1,4
3290 ENT -2,80,1,1,20,2,1
3300 SOUND 4,50,100,15,2,2,20
3310 FOR t=1 TO 500:NEXT:RETURN
3320 '****************************
3330 '*   GESTION DU SCORE       *
3340 '****************************
3350 IF vi=0 THEN GOTO 1200
3360 GRAPHICS PEN 1:TAG:MOVE 526,30:PRIN
T vi;:TAGOFF
3370 GRAPHICS PEN 1:TAG:MOVE 210,30:PRIN
T sc;:TAGOFF:RETURN
3380 '*********************
3390 '*  ALPHABET GENERE.  *
3400 '*********************
3410 SYMBOL AFTER 64
3420 SYMBOL 67,120,120,96,96,96,126,126,
0
3430 SYMBOL 65,14,30,54,102,126,102,102,
0
3440 SYMBOL 66,112,104,104,120,108,102,1
26,0
3450 SYMBOL 68,112,120,108,102,102,126,1
24,0
3460 SYMBOL 69,112,96,120,120,96,124,126
,0
3470 SYMBOL 70,126,102,96,120,112,96,96,
0
3480 SYMBOL 71,126,102,102,96,110,102,12
6,0
3490 SYMBOL 72,68,100,102,126,126,102,10
2,0
3500 SYMBOL 73,16,24,24,24,24,24,24,0
3510 SYMBOL 74,2,6,6,6,6,102,126,0
3520 SYMBOL 75,98,102,104,112,104,102,10
2,0
3530 SYMBOL 76,64,96,96,96,96,126,126,0
3540 SYMBOL 77,66,102,126,90,66,102,102,
0
3550 SYMBOL 78,66,102,118,126,102,102,10
2,0
3560 SYMBOL 79,120,108,102,102,102,126,1
26,0
3570 SYMBOL 80,120,124,100,124,96,96,96,
0
3580 SYMBOL 81,124,126,66,66,78,126,126,
0
3590 SYMBOL 82,120,100,100,120,104,102,1
02,0
3600 SYMBOL 83,60,108,96,56,12,102,124,0
3610 SYMBOL 84,126,126,24,24,24,24,12,0
3620 SYMBOL 85,68,102,102,102,102,126,12
4,0
3630 SYMBOL 86,102,102,36,36,24,24,24,0
3640 SYMBOL 87,102,102,66,66,90,102,66,0
3650 SYMBOL 88,102,102,36,24,24,102,102,
0
```

```
3660 SYMBOL 89,102,102,66,36,24,24,24,0
3670 SYMBOL 90,126,118,6,28,48,102,126,0
3680 SYMBOL 91,0,0,0,0,0,24,24,0
3690 SYMBOL 92,24,32,96,254,254,96,32,16
3700 SYMBOL 93,0,233,169,170,172,170,233
,0
3710 SYMBOL 95,0,60,126,255,129,126,24,0
3720 SYMBOL 96,60,98,249,253,253,126,60,
0
3730 SYMBOL 97,0,0,24,60,60,24,0,0
3732 SYMBOL 98,0,60,102,194,67,102,60,16
3735 SYMBOL 99,126,195,129,1,128,129,195
,110
3740 RETURN
3745 '***************************
3747 '*                          *
3750 '*         DECORS No 2      *
3752 '*                          *
3755 '***************************
3760 INK 7,0:INK 9,0
3770 INK 8,0
3780 FOR i=30 TO 370 STEP 2:MOVE i,64:DR
AW 190,150,9:NEXT i
3785 INK 9,11
3790 FOR i=0 TO 320 STEP 2:MOVE i,64:DRA
W 0,150,8:NEXT i
3795 FOR i=50 TO 650 STEP 2:MOVE i,64:DR
AW 350,155,8:NEXT i
3800 FOR i=250 TO 680 STEP 2:MOVE i,64:D
RAW 500,145,8:NEXT i
3802 INK 8,13
3810 FOR i=0 TO 140 STEP 2:MOVE i,64:DRA
W 90,160,7:NEXT i
3815 FOR i=30 TO 170 STEP 2:MOVE i,64:DR
AW 120,150,7:NEXT i
3820 FOR i=70 TO 250 STEP 2:MOVE i,64:DR
AW 175,130,7:NEXT i
3822 INK 7,15
3825 FOR i=400 TO 550 STEP 2:MOVE i,64:D
RAW 435,100,1:NEXT i
3830 FOR i=430 TO 540 STEP 2:MOVE i,64:D
RAW 500,140,1:NEXT i
3840 FOR i=490 TO 640 STEP 2:MOVE i,64:D
RAW 600,160,1:NEXT i
3860 RETURN
3870 ' presentation
3875 '***************************
3890 GOSUB 2620
3900 PEN 3:LOCATE 2,4:PRINT CHR$(225)+CH
R$(226):PEN 4:LOCATE 5,4:PRINT"VOTRE VAI
SSEAU"
3910 PEN 2:LOCATE 9,8:PRINT CHR$(227)+CH
R$(228)+CHR$(229):LOCATE 2,10:PEN 1:PRIN
T"1er VAGUE ENNEMIE"
3920 PEN 2:LOCATE 9,13:PRINT CHR$(230)+C
HR$(231)+CHR$(232):LOCATE 2,15:PEN 1:PRI
NT"2eme VAGUE ENNEMIE"
3930 PEN 2:LOCATE 9,18:PRINT CHR$(233)+C
HR$(234)+CHR$(235):LOCATE 2,20:PEN 1:PRI
NT"3eme VAGUE ENNEMIE"
3940 RESTORE 4585:FOR I=1 TO 46:READ S1,
S2
3943 SOUND 3,S1,0,0,4,0:SOUND 4,S2,0,0,4
,0
3945 NEXT I
3950 SOUND 4,400,0,0,4,0:WINDOW #1,2,19,
2,20:PEN 0:CLS#1:SOUND 4,400,0,0,4,0
3960 PEN 2:LOCATE 9,8:PRINT CHR$(236)+CH
R$(237):LOCATE 2,10:PEN 1:PRINT"4eme VAG
UE ENNEMIE"
3965 FOR I=1 TO 10:SOUND 1,400,0,0,4,0
3967 NEXT I
3970 FOR i=0 TO 1000 STEP 2:NEXT i:PEN 0
:CLS#1
3980 LOCATE 2,4:PEN 2:PRINT"VOTRE BUT ES
T"
3990 LOCATE 2,6:PRINT"DE DELIVRER LA "
4000 LOCATE 2,8:PRINT"PLANETE OMEGA"
4010 LOCATE 2,10:PRINT"MAIS SES TYRANS "
4020 LOCATE 2,12:PRINT"N'Y TIENNENT PAS.
."
4030 LOCATE 2,15:PRINT"AUSSI DEVREZ VOUS
"
4040 LOCATE 2,18:PRINT"LUTTER D'UNE FACO
N"
4050 LOCATE 2,20:PEN 1:PRINT" ACHARNEE..
."
4055 RESTORE 4585:FOR I=1 TO 46:READ S1,
S2
4057 SOUND 4,S1,0,0,4,0:SOUND 3,S2,0,0,4
,0
4058 NEXT I
4059 FOR I=1 TO 10:SOUND 1,400,0,0,4,0:N
EXT I
4060 CLS#1
4070 PEN 2:LOCATE 2,4:PRINT"LE 1er VAISS
EAU"
4080 LOCATE 2,6:PRINT"NE TIRE PAS MAIS"
4090 LOCATE 2,8:PRINT"IL EST ACCOMPAGNE"
4100 LOCATE 2,10:PRINT"D'UN SATELLITE"
4110 LOCATE 2,12:PRINT"INDESTRUCTIBLE...
"
4115 FOR I=1 TO 23:READ S1,S2
4117 SOUND 4,S1,0,0,4,0:SOUND 3,S2,0,0,4
,0:NEXT I
4120 CLS#1
4130 LOCATE 2,4:PRINT"LE 2eme VAISSEAU"
4140 LOCATE 2,6:PRINT"NE TIRE PAS MAIS"
4150 LOCATE 2,8:PRINT"S'IL EST TOUCHE"
4160 LOCATE 2,10:PRINT"SE TRANSFORME ???
"
4170 FOR I=1 TO 20:READ S1,S2
4175 SOUND 4,S1,0,0,4,0:SOUND 2,S2,0,0,4
,0
4177 NEXT I:CLS#1
4180 LOCATE 2,4:PRINT"LE 3eme VAISSEAU"
4190 LOCATE 2,6:PRINT"LUI TIRE."
4200 LOCATE 2,8:PRINT"EN PLUS S'IL EST"
4210 LOCATE 2,10:PRINT"TOUCHE IL SE "
4220 LOCATE 2,12:PRINT"TRANSFORME ???"
4230 FOR i=0 TO 7000:NEXT i:SOUND 1,400,
0,0,3,0,2:CLS#1
4240 LOCATE 2,4:PRINT"LE 4eme VAISSEAU"
4250 LOCATE 2,6:PRINT"LUI EST PERDU"
4260 LOCATE 2,8:PRINT"DANS UNE COURSE"
4270 LOCATE 2,10:PRINT"FOLLE..."
4280 LOCATE 2,12:PRINT"TOUCHEZ-LE ?"
4290 FOR i=0 TO 7000 STEP 2:NEXT i:SOUND
 3,400,0,0,3,0,3:CLS#1
4300 LOCATE 2,4:PRINT"SI VOUS VIVEZ "
4310 LOCATE 2,6:PRINT"JUSQUE-LA, ALORS"
4320 LOCATE 2,10:PEN 1:PRINT"TENTEZ LE T
ABLEAU"
4330 :LOCATE 7,12:PRINT"SUIVANT..."
4340 FOR i=0 TO 7000:NEXT i:SOUND 4,400,
0,0,3,0,3:CLS#1
4350 LOCATE 2,6:PEN 2:PRINT"SURVEILLEZ V
OTRE"
4360 LOCATE 2,8:PRINT"ENERGIE VOUS FEREZ
"
4370 LOCATE 2,10:PRINT"LE PLEIN "
4380 LOCATE 2,12:PRINT"DANS UN LABYRINTH
E"
4390 LOCATE 2,14:PRINT"DANGEREUX ???"
4400 FOR I=1 TO 10000:NEXT I:SOUND 3,400
,0,0,3,0,10
4410 RETURN
4500 '**********************************
4502 '*                                *

4503 '*            MUSIQUE             *

4505 '*                                *

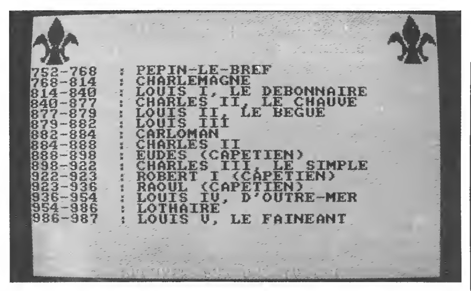
4507 '**********************************
4510 ENV 3,10,8,2,1,11,2,13,-1,2
4530 ENV 4,16,15,2
4585 'SOUND 400,0,400,0,400,0,400,0.400,
0
4590 DATA 400,0,400,0,400,0,400,0,400,0,
400,50,400,37,400,33,400,30,400,33,400,4
0,400,0,400,0,400,0,400,0.400,0,400,50,4
00,37,400,33,400,30,400,33,400,0,400,0,4
00,0,400,0,400,0,400,50,400,37,400,33.40
0,30,400,33,400,40,400,0,400,0,400.0,400
,0,400,0,400,40
4600 DATA 400,37,400,40,400,50.400,50,40
0,0,400,0,400,0,400,0,400,0,400.50.400,5
3,400,60,400,66,400,53,400.66,400,60,400
,74,400.66,400,0,400,0,400,0,400,0,400.5
0,400,53,400,60,400.66,400,66.400,0,400,
0,400,0,400,50,400,53,400.60.400;66
4610 DATA 400,53,400,66,400,60,400,74,40
0,66,400,0,400,400.0,400,80,400.74.400,8
0,400,100,400,100,400,0,400,0,400,0,400,
0,400,0
4650 RETURN
```

HISTOIRE DE FRANCE

Michel KADEYAN



Ce programme d'Histoire qui couvre une période relativement longue (de Clovis à Louis-Philippe) va vous permettre de tester vos connaissances concernant les souverains qui ont régné sur la France.



Par le menu, vous aurez accès à l'un des 3 questionnaires et, si vos résultats s'avèrent trop décevants, une quatrième option vous donnera l'occasion de réviser (ou d'apprendre...).

Note :

Le programme accepte les réponses en majuscules ou en minuscules et le numéro associé au nom d'un roi peut être entré indifféremment en chiffres romains ou arabes.
Exemple : LOUIS XIII ou louis 13.
Enfin, le numéro n'est pas obligatoire lorsqu'il s'agit du 1er roi portant ce nom.
Exemple : Clovis I ou CLOVIS.

Liste des variables :

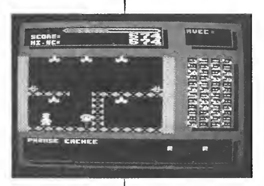
MENU$ MENU2$	Réponses aux menus
D$	Nom de la dynastie
Nb	Nombre de souverains de la dynastie
Date$	Dates de début et de fin de règne
N1$ N2$ N3$	Nom du souverain (différentes possibilités d'écriture)
S$	Surnom du souverain
Rep$	Réponse
Score	Score

```
10 REM*******************************
20 REM*                             *
30 REM*     HISTOIRE DE FRANCE      *
40 REM*                             *
50 REM*    par Michel KADEYAN       *
60 REM*      NOVEMBRE 1986          *
70 REM*******************************
80 GOSUB 62000
100 REM******MISE EN PAGE*********
110 :MODE 1:BORDER 1
120 WINDOW#0,1,40,6,24
130 WINDOW#1,6,35,1,2
140 WINDOW#2,1,5,1,5
150 WINDOW#3,36,40,1,5
160 WINDOW#4,6,35,3,5
170 WINDOW#5,1,40,25,25
175 :INK 0,0:INK 1,13:INK 2,3:INK 3,1
180 PAPER#0,1:PAPER#1,1:PAPER #2,1:PAPER
 #3,1:PAPER#4,1:PAPER#5,1
190 CLS#0:CLS#1:CLS#2:CLS#3:CLS#4:CLS#5
200 PEN#2,3:PEN#3,3
210 LOCATE#1,1,2:PEN#1,2:PRINT#1,"      H
ISTOIRE  DE  FRANCE"
300 GOSUB 60000
500 REM***********MENU************
510 CLS#0:CLS#4:CLS#5:SCORE=0
520 LOCATE #4,1,3:PEN#4,2:PRINT#4,"
    M  E  N  U   "
530 LOCATE 3,2:PEN 0:PRINT"CHRONOLOGIE D
ES SOUVERAINS.......1"
540 LOCATE 3,5:PRINT"ASSOCIATION REGNE /
 SOUVERAIN....2"
550 LOCATE 3,8:PRINT "ASSOCIATION SOUVER
AIN / SURNOM...3"
560 LOCATE 3,11:PRINT "LISTE DES SOUVERA
INS.............4"
570 LOCATE 3,14:PRINT "F I N ...........
................5"
580 LOCATE 11,17:PRINT"ENTREZ VOTRE CHOI
```

```
X"
590 MENU$=INKEY$:IF MENU$="" THEN 590
600 MENU=VAL(MENU$):IF MENU<1 OR MENU>5
THEN 590
610 ON MENU GOTO 700,1500,2000,3000,4500
0
700 REM*******SOUS-MENU**********
710 CLS
720 LOCATE 3,2:PRINT"MEROVINGIENS.......
.............1"
730 LOCATE 3,5:PRINT"CAROLINGIENS (dt 3
CAPETIENS)...2"
740 LOCATE 3,8:PRINT"CAPETIENS..........
............3"
750 LOCATE 3,11:PRINT"VALOIS - ORLEANS..
.............4"
760 LOCATE 3,14:PRINT"BOURBONS - EMPIRE
- ORLEANS.....5"
770 LOCATE 11,17:PRINT"ENTREZ VOTRE CHOI
X"
780 MENU2$=INKEY$:IF MENU2$="" THEN 780
790 MENU2=VAL(MENU2$):IF MENU2<1 OR MENU
2>5 THEN 780
800 ON MENU2 GOSUB 810,820,830,840,850
805 GOTO 1000
810 RESTORE 50010:D$="          MEROVINGI
ENS":NB=18:RETURN
820 RESTORE 50190:D$="CAROLINGIENS (dt 3
 CAPETIENS)":NB=15:RETURN
830 RESTORE 50340:D$="          CAPETIEN
S":NB=15:RETURN
840 RESTORE 50490:D$="         VALOIS-ORL
EANS":NB=13:RETURN
850 RESTORE 50620:D$="   BOURBONS-EMPIRE
-ORLEANS":NB=10:RETURN
885 :END
1000 REM*******CHRONOLOGIE********
1010 CLS:CLS#4
1020 LOCATE#4,1,2:PEN 2:PRINT#4,D$
1030 FOR I=1 TO NB:READ DATE$,N1$,N2$,N3
$,S$
1040 IF I=1 THEN A$="FONDATEUR :" ELSE A
$="SUCCESSEUR:"
1050 PEN 0:LOCATE 1,I:PRINT A$
1060 LOCATE 13,I:LINE INPUT  REP$
1070 REP$=UPPER$(REP$)
1080 IF REP$="" OR REP$<>N1$ AND REP$<>N
2$ AND REP$<>N3$ THEN GOSUB 40000 ELSE G
OSUB 40500
1090 NEXT I
1100 LOCATE#5,12,1:PEN#5,2:PRINT#5,"SCOR
E :";SCORE;" sur ";NB;
1110 SOUND 1,239,12,12: FOR T=1 TO 3000:
NEXT T
1120 GOTO 500
1500 REM**ASSOCIATION REGNE/SOUVERAIN**
1510 CLS:CLS#4
1520 LOCATE#4,1,2:PRINT#4, "  ASSOCIATIO
N REGNE/SOUVERAIN"
1530 FOR I=1 TO 10
1540 RANDOMIZE TIME:X=INT(RND*(71))+1
1542 X(I)=X
1544 FOR T=1 TO T-1
1546 IF X(I)=X(T) THEN 1540
1548 NEXT T
1550 RESTORE 50000:FOR z=1 TO x:READ DAT
E$,N1$,N2$,N3$,S$:NEXT z
1560 PEN 0:LOCATE 1,I:PRINT DATE$;TAB(10
);" :"
1570 LOCATE 13,I:LINE INPUT REP$:REP$=UP
PER$(REP$)
1580 IF REP$="" OR REP$<>N1$ AND REP$<>N
2$ AND REP$<>N3$ THEN GOSUB 40000 ELSE G
OSUB 40500
1590 NEXT I
1600 LOCATE #5,15,1:PEN#5,2:PRINT#5,"SCO
RE :";SCORE;" sur 10";
1610 SOUND 1,237,12,12:FOR T=1 TO 3000:N
EXT T
1620 GOTO 500
2000 REM**ASSOCIATION SOUVERAIN/SURNOM**
2010 CLS:CLS#4
2020 LOCATE#4,1,2:PRINT#4,"  ASSOCIATION
 SOUVERAIN/SURNOM"
2030 FOR I=1 TO 10
2040 RANDOMIZE TIME:X=INT(RND*(52))+19
2042 X(I)=X
2044 FOR T=1 TO I-1
2046 IF X(I)=X(T) THEN 2040
2048 NEXT T
2050 RESTORE 50000:FOR Z=1 TO X:READ DAT
E$,N1$,N2$,N3$,S$:NEXT Z
2060 IF S$="" THEN 2040
2070 LOCATE 1,I:PEN 0:PRINT N1$;" :"
2080 LOCATE 20,I:LINE INPUT REP$:REP$=UP
PER$(REP$)
2090 IF REP$="" OR REP$<>S$ THEN GOSUB 4
0000 ELSE GOSUB 40500
2100 NEXT I
2110 LOCATE#5,21,1:PEN#5,2:PRINT#5,"SCOR
E :";SCORE;" sur 10"
2120 SOUND 1,237,12,12:FOR T=1 TO 3000:N
EXT T
2130 GOTO 500
3000 REM****LISTE DES SOUVERAINS***
3010 d=0:GOSUB 810
3020 CLS:CLS#4:CLS#5
3030 LOCATE#4,1,2:PRINT#4,D$
3040 FOR I=1 TO NB:READ date$,n1$,n2$,n3
$,s$
3050 IF S$<>"" THEN GOTO 3070
3060 LOCATE 1,I:PEN 0:PRINT DATE$;TAB(10
);":";TAB(12);N1$:GOTO 3080
3070 LOCATE 1,I:PEN 0:PRINT DATE$;TAB(10
);":";TAB(12);N1$;", ";S$
3080 NEXT I
3090 LOCATE#5,10,1:PEN#5,2:PRINT#5,"APPU
YEZ SUR UNE TOUCHE"
3100 T$=INKEY$:IF T$="" THEN 3100
3110 d=d+1
3120 IF d=5 GOTO 500
3130 ON d GOSUB 820,830,840,850
3140 GOTO 3020
3150 GOTO 500
40000 REM******* REPONSE FAUSSE *******
40010 FOR K=1 TO 10: SOUND 1,1000,12,12:
BORDER 6:FOR K1=1 TO 50:NEXT K1:BORDER 2
4:NEXT K:BORDER 1
40020 ON MENU GOTO 40100,40100,40200
40100 LOCATE 13,I:PRINT SPACE$(28):PEN 2
:LOCATE 13,I:PRINT N1$:LOCATE 39,I:PRINT
"0":RETURN
40200 LOCATE 20,I:PRINT SPACE$(21):PEN 2
:LOCATE 20,I:PRINT S$:LOCATE 39,I:PRINT"
0":RETURN
40500 REM******** REPONSE JUSTE *******
40510 FOR K=1 TO 5:SOUND 1,237,12,12:NEX
T K:LOCATE 39,I:PEN 2:PRINT "1":SCORE=SC
ORE+1:RETURN
45000 REM********** F I N ************
45010 END
50000 REM ***** LISTE DES DATAS ****
50010 DATA 481-511,CLOVIS I,CLOVIS 1,CLO
VIS,
50020 DATA 511-558,CHILDEBERT I,CHILDEBE
RT 1,CHILDEBERT,
50030 DATA 558-561,CLOTAIRE I,CLOTAIRE 1
,CLOTAIRE,
50040 DATA 561-567,CARIBERT I,CARIBERT 1
,CARIBERT,
50050 DATA 567-584,CHILPERIC I,CHILPERIC
 1,CHILPERIC,
50060 DATA 584-628,CLOTAIRE II,CLOTAIRE
2,,
50070 DATA 628-638,DAGOBERT I,DAGOBERT 1
,DAGOBERT,
50080 DATA 638-656,CLOVIS II,CLOVIS 2,,
50090 DATA 656-670,CLOTAIRE III,CLOTAIRE
 3,,
50100 DATA 670-673,CHILDERIC II,CHILDERI
C 2,,
50110 DATA 673-691,THIERRY I,THIERRY 1,T
HIERRY,
50120 DATA 691-695,CLOVIS III,CLOVIS 3,,
50130 DATA 695-711,CHILDEBERT III,CHILDE
BERT 3,,
50140 DATA 711-715,DAGOBERT II,DAGOBERT
2,,
50150 DATA 717-719,CLOTAIRE IV,CLOTAIRE
4,,
50160 DATA 715-720,CHILPERIC II,CHILPERI
C 2,,
50170 DATA 720-737,THIERRY II,THIERRY 2,
,
50180 DATA 742-752,CHILPERIC III,CHILPER
IC 3,,
50190 DATA 752-768,PEPIN-LE-BREF,PEPIN L
```

```
E BREF,PEPIN,
50200 DATA 768-814,CHARLEMAGNE,CHARLES 1
,CHARLES 1,
50210 DATA 814-840,LOUIS I,LOUIS 1,LOUIS
,LE DEBONNAIRE
50220 DATA 840-877,CHARLES II,CHARLES 2,
,LE CHAUVE
50230 DATA 877-879,LOUIS II,LOUIS 2,,LE
BEGUE
50240 DATA 879-882,LOUIS III,LOUIS 3,,
50250 DATA 882-884,CARLOMAN,,,
50260 DATA 884-888,CHARLES II,CHARLES 2,
,
50270 DATA 888-898,EUDES (CAPETIEN),EUDE
S I,EUDES,
50280 DATA 898-922,CHARLES III,CHARLES 3
,,LE SIMPLE
50290 DATA 922-923,ROBERT I (CAPETIEN),R
OBERT I,ROBERT,
50300 DATA 923-936,RAOUL (CAPETIEN),RAOU
L I,RAOUL,
50310 DATA 936-954,LOUIS IV,LOUIS 4,,D'O
UTRE-MER
50320 DATA 954-986,LOTHAIRE,,,
50330 DATA 986-987,LOUIS V,LOUIS 5,,LE F
AINEANT
50340 DATA 987-996,HUGUES CAPET,,,
50350 DATA 996-1031,ROBERT II,ROBERT 2,,
50360 DATA 1031-1060,HENRI I,HENRI 1,HEN
RI,
50370 DATA 1060-1108,PHILIPPE I,PHILIPPE
 1,PHILIPPE,
50380 DATA 1108-1137,LOUIS VI,LOUIS 6,,L
E GROS
50390 DATA 1137-1180,LOUIS VII,LOUIS 7,,
LE JEUNE
50400 DATA 1180-1223,PHILIPPE II,PHILIPP
E 2,,AUGUSTE
50410 DATA 1223-1226,LOUIS VIII.LOUIS 8,
,LE LION
50420 DATA 1226-1270,LOUIS IX,LOUIS 9,,S
AINT LOUIS
50430 DATA 1270-1285,PHILIPPE III,PHILIP
PE 3,,LE HARDI
50440 DATA 1285-1314,PHILIPPE IV,PHILIPP
E 4,,LE BEL
50450 DATA 1314-1316,LOUIS X,LOUIS 10,,L
E HUTIN
50460 DATA 1316,JEAN I,JEAN 1,JEAN,LE PO
STHUME
50470 DATA 1316-1322,PHILIPPE V,PHILIPPE
 5,,LE LONG
50480 DATA 1322-1328,CHARLES IV.CHARLES
4,,LE BEL
50490 DATA 1328-1350,PHILIPPE VI,PHILIPP
E 6,,
50500 DATA 1350-1364,JEAN II,JEAN 2,,LE
BON
50510 DATA 1364-1380,CHARLES V,CHARLES 5
,,LE SAGE
50520 DATA 1380-1422,CHARLES VI,CHARLES
6,,LE FOL
50530 DATA 1422-1461,CHARLES VII,CHARLES
 7,,LE VICTORIEUX
50540 DATA 1461-1483,LOUIS XI,LOUIS 11,,
50550 DATA 1483-1498,CHARLES VIII,CHARLE
S 8,,
50560 DATA 1498-1515,LOUIS XII,LOUIS 12,
,LE PERE DU PEUPLE
50570 DATA 1515-1547,FRANCOIS I,FRANCOIS
 1,FRANCOIS,
50580 DATA 1547-1559,HENRI II,HENRI 2,,
50590 DATA 1559-1560,FRANCOIS II,FRANCOI
S 2,,
50600 DATA 1560-1574,CHARLES IX,CHARLES
9,,
50610 DATA 1574-1589,HENRI III,HENRI 3,,
50620 DATA 1589-1610,HENRI IV,HENRI 4,,L
E GRAND
50630 DATA 1610-1643,LOUIS XIII,LOUIS 13
,,LE JUSTE
50640 DATA 1643-1715,LOUIS XIV,LOUIS 14,
,LE ROI SOLEIL
50650 DATA 1715-1774,LOUIS XV,LOUIS 15,,
LE BIEN AIME
50660 DATA 1774-1793,LOUIS XVI,LOUIS 16,
,
50670 DATA 1793-1795,LOUIS XVII,LOUIS 17
,,
50680 DATA 1804-1814,NAPOLEON I,NAPOLEON
 1,NAPOLEON,
50690 DATA 1814-1824,LOUIS XVIII,LOUIS 1
8,,LE DESIRE
50700 DATA 1824-1830,CHARLES X,CHARLES 1
0,,
50710 DATA 1830-1848,LOUIS-PHILIPPE I,LO
UIS-PHILIPPE 1,LOUIS-PHILIPPE,
60000 REM***** DESSIN FLEUR DE LYS ****
60010 SYMBOL AFTER 220
60020 SYMBOL 220,0,16,56,60,126,126,255,
255
60030 SYMBOL 221,0,0,0,0,0,0,1,7
60040 SYMBOL 222,1,3,3,3,7,7,199,231
60050 SYMBOL 223,255,255,255,255,255,255
,255,255
60060 SYMBOL 224,128,192,192,192,224,224
,227,231
60070 SYMBOL 225,0,0,0,0,0,0,128,224
60080 SYMBOL 226,15,31,31,63,63,126,96,6
4
60090 SYMBOL 227,231,243,251,251,249,124
,60,30
60100 SYMBOL 228,255,255,255,255,255,255
,255,190
60110 SYMBOL 229,231,207,223,223,159,62,
60,120
60120 SYMBOL 230,240,248,248,252,124,126
,6,2
60130 SYMBOL 231,14,15,15,15,15,14,14,28
60140 SYMBOL 232,126,126,255,255,255,255
,255,255
60150 SYMBOL 233,112,240,240,240,240,112
,112,56
60160 SYMBOL 234,249,249,243,115,7,7,0,0
60170 SYMBOL 235,255,255,255,255,255,255
,0,0
60180 SYMBOL 236,159,159,207,206,224,224
,0,0
61000 'DESSIN
61010 LOCATE#2,1,1:PRINT#2,CHR$(32);CHR$
(32);CHR$(220);CHR$(32);CHR$(32)
61020 LOCATE#2,1,2:PRINT#2,CHR$(221);CHR
$(222);CHR$(223);CHR$(224);CHR$(225)
61030 LOCATE#2,1,3:PRINT#2,CHR$(226);CHR
$(227);CHR$(228);CHR$(229);CHR$(230)
61040 LOCATE#2,1,4:PRINT#2,CHR$(32);CHR$
(231);CHR$(232);CHR$(233);CHR$(32)
61050 LOCATE#2,1,5:PRINT#2,CHR$(32);CHR$
(234);CHR$(235);CHR$(236);CHR$(32);
61060 LOCATE#3,1,1:PRINT#3,CHR$(32);CHR$
(32);CHR$(220);CHR$(32);CHR$(32)
61070 LOCATE#3,1,2:PRINT#3,CHR$(221);CHR
$(222);CHR$(223);CHR$(224);CHR$(225)
61080 LOCATE#3,1,3:PRINT#3,CHR$(226);CHR
$(227);CHR$(228);CHR$(229);CHR$(230)
61090 LOCATE#3,1,4:PRINT#3,CHR$(32);CHR$
(231);CHR$(232);CHR$(233);CHR$(32)
61100 LOCATE#3,1,5:PRINT#3,CHR$(32);CHR$
(234);CHR$(235);CHR$(236);CHR$(32);
61110 RETURN
62000 REM******PRESENTATION***********
62010 MODE 0:INK 0,20:INK 1,2:INK 2,6:IN
K 3,4
62020 PAPER 0:BORDER 11
62030 PEN 1:LOCATE 7,6:PRINT"HISTOIRE"
62040 LOCATE 10,9:PRINT"DE"
62050 LOCATE 8,12:PRINT"FRANCE"
62060 PEN 2:LOCATE 6,15:PRINT"(481-1848)
"
62070 PEN 3:LOCATE 2,23:PRINT"par Michel
 KADEYAN";
63000 REM********MUSIQUE***************
63010 RESTORE 64000:FOR T=1 TO 53
63020 READ NO,DU
63030 SOUND 1,NO,DU/2
63040 NEXT T
64000 DATA 190,30,169,30,159,30,169,30,1
90,30,0,30,127,30,0,30,127,30,0,30,142,3
0,0,30,159,60,169,60,190,30,169,30,159,3
0,142,30,127,30,0,30,95,30,0,30,100,60,9
5,60,84,120,0,60
64010 DATA 190,30,169,30,159,30,169,30,1
90,30,0,30,127,30,0,30,127,30,0,30,142,3
0,0,30,159,60,169,60,190,30,169,30,159,3
0,142,30,127,30,0,30,95,30,0,30,100,30,9
5,30,84,30,100,30,95,120
64020 FOR T=1 TO 1500:NEXT T:RETURN
```

GASTON



James Bond 007, vous connaissez ? L'espion au service de sa Majesté est bien sûr aussi célèbre que Margaret Thatcher. Mais en France, nous avons Gaston l'agent de la DST et celui-ci est aussi très efficace.

Sa mission : découvrir les messages codés envoyés par des espions à la solde d'une puissance étrangère.
Le lieu : un immeuble truffé de téléphones et d'ascenseurs.
Les messages secrets se trouvent en clair dans le programme, alors ne trichez pas : tapez le listing les yeux fermés !

```
10  ***********************************
    *                                 *
    * GASTON  Y A  L'TELEFON  QUI SON *
    *                                 *
20  *   gilles GUIGON    MARS 1987    *
    *                                 *
    *         pour  CPC 464           *
    *                                 *
    ***********************************
30 ON BREAK GOSUB 7740
40 SPEED KEY 10,7
50 SYMBOL AFTER 32
60 MODE 0
70 LOCATE 2,7:PRINT"P A T I E N T E Z"
80 LOCATE 4,13:PRINT". S . V . P ."
90 FOR I=1 TO 2000:NEXT
100 GOTO 2960:REM    mise en page
110 '***********************************
    *                                 *
    *     REDEFINITION DE GASTON      *
    *                                 *
    ***********************************
120 SYMBOL 196,60,126,231,219,219,60,126
,126:'  telephone
130 SYMBOL 65,0,0,0,0,0,0,0,0:   efface
140  ***********************************
    *                                 *
    * bonhomme marche vers la droite  *
    *                                 *
    ***********************************
150 SYMBOL 66,60,126,60,52,62,60,24,60
160 SYMBOL 67,126,126,247,251,60,118,110
,119
170 SYMBOL 68,0,128,0,0,128,0,0,0
180 SYMBOL 69,128,128,128,128,0,0,0,0
190 SYMBOL 70,15,31,15,13,15,15,6,15
200 SYMBOL 71,27,27,27,29,15,6,6,7
210 SYMBOL 72,192,224,192,64,224,192,128
,192
220 SYMBOL 73,224,224,112,176,192,96,224
,112
230 SYMBOL 74,3,7,3,3,3,3,1,3
240 SYMBOL 75,7,7,15,15,3,7,6,7
250 SYMBOL 76,240,248,240,208,248,240,96
,240
260 SYMBOL 77,248,252,254,246,248,218,14
,140
270 SYMBOL 78,0,1,0,0,0,0,0,0
280 SYMBOL 79,1,3,7,6,0,1,3,3
290 '***********************************
    *                                 *
    * bonhomme marche vers la gauche  *
    *                                 *
    ***********************************
300 SYMBOL 80,60,126,60,44,124,60,24,60
310 SYMBOL 81,126,126,239,223,60,110,118
,238
320 SYMBOL 82,240,248,240,176,240,240,96
,240
330 SYMBOL 83,216,216,216,184,240,96,96,
224
340 SYMBOL 84,0,1,0,0,0,0,0,0
350 SYMBOL 85,1,1,1,1,0,0,0,0
360 SYMBOL 86,192,224,192,192,192,192,12
8,192
370 SYMBOL 87,224,224,240,240,192,224,96
,224
380 SYMBOL 88,3,7,3,2,7,3,1,3
390 SYMBOL 89,7,7,14,13,3,6,7,14
400 SYMBOL 90,0,128,0,0,0,0,0,0
410 SYMBOL 91,128,192,224,0,0,128,192,19
2
420 SYMBOL 92,15,31,15,11,31,15,6,15
430 SYMBOL 93,31,63,127,111,31,91,112,49
440 DIM d$(4,2),g$(4,2)
450 d$(1,1)=CHR$(66)+CHR$(65):d$(1,2)=CH
R$(67)+CHR$(65)
460 d$(2,1)=CHR$(70)+CHR$(68):d$(2,2)=CH
R$(71)+CHR$(69)
470 d$(3,1)=CHR$(74)+CHR$(72):d$(3,2)=CH
R$(75)+CHR$(73)
480 d$(4,1)=CHR$(78)+CHR$(76):d$(4,2)=CH
R$(79)+CHR$(77)
490 g$(1,1)=CHR$(65)+CHR$(80):g$(1,2)=CH
R$(65)+CHR$(81)
500 g$(2,1)=CHR$(84)+CHR$(82):g$(2,2)=CH
R$(85)+CHR$(83)
510 g$(3,1)=CHR$(88)+CHR$(86):g$(3,2)=CH
R$(89)+CHR$(87)
520 g$(4,1)=CHR$(92)+CHR$(90):g$(4,2)=CH
R$(93)+CHR$(91)
530  ***********************************
    *                                 *
    *          presentation           *
    *                                 *
    ***********************************
540 BORDER 1:INK 15,11:INK 14,12:INK 13,
23:INK 12,14:INK 11,1:INK 10,15:INK 9,24
,0:INK 8,0,6:INK 7,9:INK 6,15:INK 5,6:IN
K 2,18:INK 1,26:INK 0,0
550 WINDOW#0,1,20,1,26
560 TEXT$="PHRASE CACHEE":TX=2:TY=21:PEN
 5:GOSUB 4730
570 WINDOW#0,2,13,11,17
580 TEXTE$="R   POUR   REGLE DU JEU

    J   POUR   JOUER "
590 TX=1:TY=1:PEN 2:GOSUB 4640
600 WHILE INKEY$<>"":WEND:CALL &BB06
610 que$=INKEY$:IF que$="" THEN 610
620 IF que$="J" OR que$="j" THEN GOTO 96
0
630 CLS
640 WINDOW#0,1,20,7,19
650 text$="REGLES DU JEU":TX=4:TY=2:PEN
2:GOSUB 4730
660 TEXT$="ENFONCEZ UNE TOUCHE":PEN 4:TX
=3:TY=13:GOSUB 4730
670 WINDOW#0,2,13,11,17
680 TEXTE$="EXPLICATION DES TABLEAUX"
690 TX=1:TY=4:PEN 5:GOSUB 4640:GOSUB 776
0
700 TEXTE$="VOUS REMARQUEZ A DROITE DOUZ
E LIGNES DE QUATRE  RANGEES    C EST LE
PLANDE  L IMMEUBLE           CHAQUE DESSI
N REPRESENTEUNE DES TROIS VARIETES  DE P
IECES"
```

```
710 TX=1:TY=1:PEN 3:GOSUB 4640:GOSUB 776
0
720 TEXTE$="EXEMPLES                    PIEC
ES SANS ASCENSEUR
    PIECES AVEC ASCENSEUR   MONTANT
            PIECES AVEC ASCENSEUR   DESC
ENDANT"
730 TX=1:TY=1:GOSUB 4640
740 LOCATE 8,3:PEN 6:PRINT CHR$(135);
750 LOCATE 8,5:PRINT CHR$(123)
760 LOCATE 8,7:PRINT CHR$(126):GOSUB 776
0
770 TEXTE$="LE CADRE MARQUE   AVEC CONTI
ENDRA LE NOMBRE DE VIES A VOTRE ACTIF
   LE CADRE AU DESSUS SE   PASSE DE COMM
ENTAIRES   LE CADRE DU BAS CONTIENTLA PH
RASE A DECOUVRIR"
780 TX=1:TY=1:PEN 3:GOSUB 4640:GOSUB 776
0
790 TEXTE$=" DEROULEMENT DU JEU"
800 TX=1:TY=4:PEN 6:GOSUB 4640:GOSUB 776
0
810 TEXTE$="VOUS ETES GASTON LESPIONAGEN
T DE LA DST            DES INFORMATIONS SOR
TENTDE FRANCE GRACE A UNE   TAUPE ET VOU
S DEVEZ     INTERCEPTER CES FUITES"
820 TX=1:TY=1:PEN 3:GOSUB 4640:GOSUB 776
0
830 TEXTE$="COMME LES ESPIONS SONT  DES
GENS MEFIANTS ILS NETRANSMETTENT LES DOC
S   QUE LETTRE PAR LETTRE ETJAMAIS DEUX
FOIS AU     MEME TELEFON"
840 TX=1:TY=1:PEN 3:GOSUB 4640:GOSUB 776
0
850 TEXTE$="VOUS DEVEZ DONC ALLER   D UN
 TELEFON A  L AUTRE POUR VOUS SITUER DAN
S LEPLAN SUIVEZ LE POINT    BLANC  LES
POINTS VERTSVOUS SERVIRONT AUSSI"
860 TX=1:TY=1:PEN 3:GOSUB 4640:GOSUB 776
0
870 TEXTE$=" QUELQUES CONSEILS"
880 TX=2:TY=4:PEN 6:GOSUB 4640:GOSUB 776
0
890 TEXTE$="POUR VOUS DEPLACER       UTIL
ISEZ LES FLECHES DU CURSEUR DROITE ET GA
UCHEET COPY POUR SAUTER     POUR REPONDR
E AU TELEFONIL FAUT VOUS PLACER      DESS
US ET LE BIP SARRETE"
900 TX=1:TY=1:PEN 3:GOSUB 4640:GOSUB 776
0
910 TEXTE$="NORMALEMENT UNE LETTRE  IRA
S AFFICHER DANS LE CADRE DU BAS SAUF  S
 IL S AGIT  D UN ESPACE"
920 TX=1:TY=1:PEN 3:GOSUB 4640:GOSUB 776
0
930 TEXTE$="SI VOUS VOULEZ ALLER A  LA P
IECE VOISINE ET QUUNASCENSEUR VOUS OBLIG
E A MONTER OU A DESCENDRE   SAUTEZ POUR
 L EVITER ENENFONCANT LA TOUCHE COPYAVEC
 LA FLECHE DIRECTION"
940 TX=1:TY=1:PEN 3:GOSUB 4640:GOSUB 776
0
950 '**********************************
    *                              *
    *    FIN DE LA PRESENTATION    *
    *                              *
    ********************************
960 EVERY 100,1 GOSUB 7490
970 REM
980 PEN #4,1
990 INK 1,26
1000 PRINT#4,STRING$(4,66);
1010 PRINT#4,STRING$(4,67);
1020 FOR cam=0 TO 3
1030 xcam(cam)=0
1040 ycam(cam)=-10
1050 NEXT cam
1060 vies=5
1070 WINDOW#0,1,14,7,19:CLS
1080 gpa=6:gpo=2
1090 a=526:b=84
1100 ORIGIN 1,129
1110 x=XPOS:y=YPOS
1120 PRINT CHR$(22)+CHR$(0);
1130 CLS:PRINT CHR$(23)+CHR$(0);
1140 temps=400
1150 PLOT 144,246,12:DRAWR 252,0
1160 ON gaston(gpa,gpo) GOSUB 5570,5610,
5650,5690,5730,5770,5810,5860,6010,6050,
6200,6240,4910,5270,5370,5470
1170 PEN 1
1180 n=1
1190 SPEED KEY 1,1
1200 PRINT CHR$(23)+CHR$(1);
1210 TAG
1220 x=x+32:y=y+16
1230 d=1:
1240 GOSUB 1890
1250 '**********************************
    *                              *
    *     BOUCLE DEPLACEMENTS      *
    *                              *
    ********************************
1260 te=0
1270 IF tim=0 AND times=200 THEN GOTO 71
00
1280 IF condi=1 THEN GOSUB 1940:GOTO 242
0
1290 IF INKEY(9)=0 THEN GOTO 1960
1300 IF INKEY(8)=0 THEN GOTO 1610
1310 IF INKEY(1)=0 THEN GOTO 1330
1320 GOTO 1270
1330 '**********************************
    *                              *
    * GASTON MARCHE VERS LA DROITE *
    *                              *
    ********************************
1340 '
1350 IF nt(gpa,gpo)=1 THEN INK 8,6:h=REM
AIN(0)
1360 IF x<376 THEN GOTO 1430
1370 IF NOT (gaston(gpa,gpo)>3 AND gasto
n(gpa,gpo)<13) THEN GOTO 1410
1380 IF y=112 THEN GOSUB 1890:b=b-8:y=1:
x=328:GOTO 1220
1390 IF gpa=12 THEN GOSUB 1890:GOTO 2670
1400 GOSUB 1890:gpa=gpa+1:b=b-8:y=96:x=3
28:TAGOFF:GOSUB 6280:GOTO 1130
1410 IF gpo=4 THEN GOSUB 1890:GOTO 2670
1420 GOSUB 1890:gpo=gpo+1:a=a+32:x=1:y=y
-16:TAGOFF:GOSUB 6280:GOTO 1130
1430 IF y<112 THEN GOTO 1500
1440 IF tex=12 THEN 1490
1450 IF TEST(x+30+(n*10),y-12)<>8 OR nt(
gpa,gpo) THEN 1490
1460 nt(gpa,gpo)=1:GOSUB 6700
1470 INK 8,6
1480 tel=ASC(nt$(gpa,gpo))-32
1490 IF TEST(x+30+(N*5),y-36)=0 THEN GOS
UB 1890:GOTO 2400 ELSE 1560
1500 IF x<300 AND TEST(x+60,y)<>0 THEN G
OSUB 1890:GOTO 1590
1510 IF tex=6 THEN 1560
1520 IF TEST(x+30+(n*10),y-12)<>8 OR nt(
gpa,gpo) THEN 1560
1530 tel=ASC(nt$(gpa,gpo))-32
1540 nt(gpa,gpo)=1:GOSUB 6700
1550 INK 8,6
1560 GOSUB 1890
1570 N=N+1:IF N=5 THEN N=1:x=x+24
1580 D=1:X=X+8
1590 GOSUB 1890
1600 GOTO 1270
1610 '**********************************
    *                              *
    * GASTON MARCHE VERS LA GAUCHE *
    *                              *
    ********************************
1620 '
1630 IF nt(gpa,gpo)=1 THEN INK 8,6:h=REM
AIN(0)
1640 IF x>16 THEN GOTO 1710
1650 IF NOT((gaston(gpa,gpo)<4) OR (gast
on(gpa,gpo)>6 AND gaston(gpa,gpo)<13)) T
HEN GOTO 1690
1660 IF y<112 THEN GOSUB 1890:b=b+8:y=96
:x=1:GOTO 1220
1670 IF gpa=1 THEN GOSUB 1890:GOTO 2670
1680 GOSUB 1890:gpa=gpa-1:b=b+8:y=1:x=1:
TAGOFF:GOSUB 6280:GOTO 1130
1690 IF gpo=1 THEN GOSUB 1890:GOTO 2670
1700 GOSUB 1890:gpo=gpo-1:a=a-32:y=y-16:
x=328:TAGOFF:GOSUB 6280:GOTO 1130
1710 IF y<112 THEN GOTO 1780
1720 IF tex=12 THEN 1770
1730 IF TEST(x+30-(n*10),y-12)<>8 OR nt(
gpa,gpo) THEN 1770
```

```
1740 tel=ASC(nt$(gpa,gpo))-32
1750 nt(gpa,gpo)=1:GOSUB 6700
1760 INK 8,6
1770 IF TEST(x+42-(N*5),y-38)=0 THEN GOS
UB 1890:GOTO 2400
1780 IF x>70 AND TEST(x,y)<>0 THEN GOSUB
 1890:GOTO 1870
1790 IF tex=6 THEN 1840
1800 IF TEST(x+30-(n*10),y-12)<>8 OR nt(
gpa,gpo) THEN 1840
1810 nt(gpa,gpo)=1:GOSUB 6700
1820 INK 8,6
1830 tel=ASC(nt$(gpa,gpo))-32
1840 GOSUB 1890
1850 N=N+1:IF N=5 THEN N=1:x=x-24
1860 D=0:X=X-8
1870 GOSUB 1890
1880 GOTO 1270
1890 '**********************************
     *                                *
     *        EFFACE et AFFICHE       *
     *  LA POSITION ACTUELLE DE GASTON *
     *                                *
     **********************************
1900 IF temps-142<=0 THEN GOTO 1940
1910 temps=temps-2
1920 IF temps/4<>INT(temps/4) THEN GOTO
1940
1930 PLOT temps,246,12
1940 IF D=1 THEN DI:PLOT a,b,1:MOVE X,Y:
PRINT D$(N,1);:MOVE X,Y-16:PRINT D$(N,2)
;:EI:RETURN
1950 DI:PLOT a,b,1:MOVE X,Y:PRINT G$(N,1
);:MOVE X,Y-16:PRINT G$(N,2);:EI:RETURN
1960 '**********************************
     *                                *
     *          GASTON SAUTE          *
     *                                *
     **********************************
1970 '
1980 IF INKEY(1)=0 THEN t=+12:GOTO 2020
1990 IF INKEY(8)=0 THEN T=-12:GOTO 2210
2000 T=0
2010 IF d=0 THEN GOTO 2210
2020 IF y=112 THEN GOTO 2040
2030 IF x<300 THEN IF t=0 THEN GOTO 1270
 ELSE t=-12:GOTO 1270
2040 FOR I=1 TO 4
2050 GOSUB 1890
2060 SOUND 1,150-y,1,4
2070 D=1:Y=Y+4:X=X+T
2080 GOSUB 1890
2090 NEXT I
2100 IF x<376 THEN GOTO 2140
2110 GOSUB 1890
2120 IF gpo=4 THEN GOTO 2670
2130 gpo=gpo+1:a=a+32:x=1:y=y-32:TAGOFF:
GOSUB 6280:GOTO 1130
2140 FOR I=1 TO 4
2150 GOSUB 1890
2160 SOUND 1,150-y,1,5
2170 D=1:Y=Y-4:X=X+T
2180 GOSUB 1890
2190 NEXT i
2200 GOTO 1270
2210 IF y=112 THEN GOTO 2230
2220 IF x>70 THEN IF t=0 THEN GOTO 1270
ELSE t=+12:GOTO 1270
2230 FOR i=1 TO 4
2240 GOSUB 1890
2250 SOUND 1,150-y,1,5
2260 d=0:y=y+4:x=x+t
2270 GOSUB 1890
2280 NEXT i
2290 IF x>1 THEN GOTO 2330
2300 GOSUB 1890
2310 IF gpo=1 THEN GOTO 2670
2320 gpo=gpo-1:a=a-32:x=328:y=y-32:TAGOF
F:GOSUB 6280:GOTO 1130
2330 FOR i=1 TO 4
2340 GOSUB 1890
2350 SOUND 1,150-y,1,5
2360 d=0:y=y-4:x=x+t
2370 GOSUB 1890
2380 NEXT i
2390 GOTO 1270
2400 '**********************************
     *                                *
     *          gaston tombe          *
     *                                *
     **********************************
2410 '
2420 IF d=0 THEN 2550
2430 x=x+16:y=y-4
2440 IF y>0 THEN GOTO 2500
2450 TAGOFF:CLS
2460 vies=vies-1:IF vies=0 THEN GOTO 728
0
2470 LOCATE#4,vies,1:PRINT#4," ";
2480 LOCATE#4,vies,2:PRINT#4," ";
2490 x=1:y=1:b=b-8:condi=0:GOTO 1130
2500 y=y-8
2510 GOSUB 1940
2520 SOUND 1,50+y,3,,1
2530 GOSUB 1940
2540 GOTO 2440
2550 y=y-4
2560 IF y>0 THEN GOTO 2620
2570 TAGOFF:CLS
2580 vies=vies-1:IF vies=0 THEN GOTO 728
0
2590 LOCATE#4,vies,1:PRINT#4," ";
2600 LOCATE#4,vies,2:PRINT#4," ";
2610 x=1:y=1:b=b-8:condi=0:GOTO 1130
2620 y=y-8
2630 GOSUB 1940
2640 SOUND 1,50+y,3,,1
2650 GOSUB 1940
2660 GOTO 2560
2670 '**********************************
     *                                *
     *     gaston sort du tableau     *
     *                                *
     **********************************
2680 '
2690 x=260:y=200:
2700 IF d=1 THEN GOTO 2830
2710 IF y>0 THEN GOTO 2780
2720 TAGOFF:CLS:vies=vies-1:IF vies=0 TH
EN GOTO 7280
2730 LOCATE#4,vies,1:PRINT#4," ";
2740 LOCATE#4,vies,2:PRINT#4," ";
2750 x=1:y=1
2760 IF NOT (b-20)/16=INT((b-20)/16) THE
N b=b-8
2770 GOTO 1130
2780 y=y-8
2790 GOSUB 1940
2800 SOUND 1,50+y,3,,1
2810 GOSUB 1940
2820 GOTO 2710
2830 IF y>10 THEN GOTO 2910
2840 TAGOFF:CLS
2850 vies=vies-1:IF vies=0 THEN GOTO 728
0
2860 LOCATE#4,vies,1:PRINT#4," ";
2870 LOCATE#4,vies,2:PRINT#4," ";
2880 x=1:y=1
2890 IF NOT (b-20)/16=INT((b-20)/16) THE
N b=b-8
2900 GOTO 1130
2910 y=y-8
2920 GOSUB 1940
2930 SOUND 1,50+y,3,,1
2940 GOSUB 1940
2950 GOTO 2830
2960 '**********************************
     *                                *
     *          mise en page          *
     *                                *
     **********************************
2970 DEFINT a-z
2980 MODE 0
2990 FOR i=0 TO 15:INK i,0:NEXT i
3000 BORDER 0:PAPER 15:CLS:PAPER 0
3010 '**********************************
     *                                *
     * trace du cadre des commentaires *
     *                                *
     **********************************
3020 SYMBOL AFTER 32
3030 SYMBOL 150,255,255,255,143,143,143,
143,143
3040 SYMBOL 151,143,143,143,143,143,143,
143,143
3050 SYMBOL 152,255,240,240,240,240,255,
255,255
```

```
3060 SYMBOL 153,255,0,0,0,0,255,255,255
3070 SYMBOL 154,143,15,15,15,15,255,255,
255
3080 WINDOW#3,1,20,21,25:CLS#3
3090 PEN#3,15:LOCATE#3,20,1:PRINT#3,CHR$
(150);
3100 FOR i=2 TO 4:LOCATE#3,20,i:PRINT#3,
CHR$(151);:NEXT i
3110 FOR i=1 TO 4:LOCATE#3,1,i:PRINT#3,C
HR$(133);:NEXT i
3120 LOCATE#3,1,5:PRINT#3,CHR$(143)+STRI
NG$(18,153)+CHR$(154);
3130 WINDOW#3,2,19,21,24:CLS#3
3140 '**********************************
    *                              *
    *       trace du carre du plan *
    *                              *
    ********************************
3150 WINDOW#1,16,20,8,19:CLS#1
3160 PEN#1,15:FOR i=1 TO 11:LOCATE#1,5,i
:PRINT#1,CHR$(151);:NEXT i
3170 LOCATE#1,1,12:PRINT#1,CHR$(152)+STR
ING$(3,153)+CHR$(154);
3180 WINDOW#1,16,19,7,18:CLS#1
3190 '**********************************
    *                              *
    *       trace du carre de vies *
    *                              *
    ********************************
3200 WINDOW#4,16,20,2,5:CLS#4
3210 PEN#4,15:LOCATE#4,5,1:PRINT#4,CHR$(
150);
3220 FOR i=2 TO 3:LOCATE#4,5,i:PRINT#4,C
HR$(151);:NEXT i
3230 LOCATE#4,1,4:PRINT#4,CHR$(152)+STRI
NG$(3,153)+CHR$(154);
3240 SYMBOL 156,0,0,117,85,117,87,82,0
3250 SYMBOL 157,0,0,119,68,100,68,119,0
3260 SYMBOL 158,0,0,0,48,0,48,0,0
3270 PEN #4,12:LOCATE#4,1,1:PRINT#4,CHR$
(156)+CHR$(157)+CHR$(158);
3280 WINDOW#4,16,19,3,4:CLS#4
3290 '**********************************
    *                              *
    * affichage du tableau des scores *
    *                              *
    ********************************
3300 WINDOW#2,2,14,2,5:CLS#2
3310 PEN#2,15:LOCATE#2,13,1:PRINT#2,CHR$
(150);
3320 FOR i=2 TO 3:LOCATE#2,13,i:PRINT#2,
CHR$(151);:NEXT i
3330 LOCATE#2,1,4:PRINT#2,STRING$(12,153
)+CHR$(154);
3340 SYMBOL 150,0,0,238,170,234,138,142,
0
3350 SYMBOL 151,0,0,234,78,78,78,234,0
3360 SYMBOL 161,0,0,238,72,78,66,78,0
3370 SYMBOL 152,0,0,31,32,64,32,31,0
3380 SYMBOL 153,0,0,255,0,0,0,255,0
3390 SYMBOL 154,0,0,248,4,2,4,248,0
3400 SYMBOL 155,0,0,119,68,116,20,119,0
3410 SYMBOL 156,0,0,118,85,86,85,117,0
3420 SYMBOL 157,0,0,112,70,112,70,112,0
3430 SYMBOL 158,0,0,87,82,114,82,87,0
3440 SYMBOL 159,0,0,7,4,7,33,7,0
3450 SYMBOL 160,0,0,112,70,64,70,112,0
3460 PEN#5,6
3470 WINDOW#2,1,13,2,4:PEN#2,15
3480 FOR i=1 TO 3:LOCATE#2,1,i:PRINT#2,C
HR$(133);:NEXT i
3490 WINDOW#2,2,13,2,4:CLS#2
3500 PEN#2,7:LOCATE#2,1,1
3510 PRINT#2,CHR$(150)+CHR$(151)+CHR$(16
1);
3520 PEN #2,6:PRINT#2,CHR$(152)+STRING$(
7,153)+CHR$(154);
3530 PEN#2,5:LOCATE#2,1,2
3540 PRINT#2,CHR$(155)+CHR$(156)+CHR$(15
7);
3550 PEN#2,6:PRINT#2,STRING$(9,"0");
3560 PEN#2,1:LOCATE#2,1,3
3570 PRINT#2,CHR$(158)+CHR$(159)+CHR$(16
0);
3580 PEN#2,6:PRINT#2,STRING$(9,"0");
3590 WINDOW#2,5,13,3,4
3600 SYMBOL AFTER 32
3610 '**********************************
    *                              *
    *            plan              *
    *                              *
    ********************************
3620 SYMBOL AFTER 32
3630 SYMBOL 122,255,129,129,129,129,129,
129,255
3640 SYMBOL 123,255,193,193,253,129,129,
189,255
3650 SYMBOL 124,255,193,193,237,129,129,
189,255
3660 SYMBOL 125,255,193,193,213,129,129,
189,255
3670 SYMBOL 126,255,129,129,189,131,131,
191,255
3680 SYMBOL 127,255,129,129,181,131,131,
191,255
3690 SYMBOL 128,255,129,129,169,131,131,
191,255
3700 SYMBOL 129,255,193,193,253,131,131,
191,255
3710 SYMBOL 130,255,193,193,237,139,139,
191,255
3720 SYMBOL 131,255,193,193,237,131,131,
191,255
3730 SYMBOL 132,255,193,193,245,147,147,
191,255
3740 SYMBOL 133,255,193,193,245,131,131,
191,255
3750 SYMBOL 134,255,193,193,217,131,131,
191,255
3760 SYMBOL 135,255,129,129,189,129,129,
189,255
3770 SYMBOL 136,255,129,129,173,129,129,
189,255
3780 SYMBOL 137,255,129,129,181,129,129,
189,255
3790 SYMBOL 138,255,129,129,169,129,129,
189,255
3800 DIM salle(12,4),prov(12,4),gaston(1
2,4)
3810 GOSUB 3820:GOTO 4020
3820 FOR i=1 TO 12:FOR j=1 TO 4:LOCATE#1
,j,i:PRINT#1,CHR$(32);:NEXT j,i
3830 PRINT#1,CHR$(22)+CHR$(1);
3840 FOR i=1 TO 12
3850 FOR j=1 TO 4
3860 salle=INT(RND*4)+1
3870 prov(i,j)=salle
3880 IF j=1 THEN 3920
3890 FOR h=1 TO j-1
3900 IF prov(i,j)=prov(i,h) THEN GOTO 38
60
3910 NEXT h
3920 IF prov(i,j)=1 THEN salle(i,j)=INT(
RND*3)+1:GOTO 3950
3930 IF prov(i,j)=2 THEN salle(i,j)=INT(
RND*3)+4:GOTO 3950
3940 salle(i,j)=INT(RND*10)+7
3950 PEN#1,6:LOCATE#1,j,i:PRINT#1,CHR$(1
22+salle(i,j));
3960 PEN#1,15:LOCATE#1,j,i:PRINT#1,CHR$(
122);
3970 gaston(i,j)=salle(i,j)
3980 NEXT j
3990 NEXT i
4000 PRINT#1,CHR$(22)+CHR$(0);
4010 RETURN
4020 '**********************************
    *                              *
    *       trace  du  cadre #0    *
    *                              *
    ********************************
4030 WINDOW#0,1,14,7,19:CLS
4040 '**********************************
    *.                             *
    *       trace des tableaux     *
    *                              *
    ********************************
4050 SYMBOL 197,24,24,24,24,90,90,165,66
4060 SYMBOL 198,0,0,0,165,0,165,66,0:
    '     LAMPE
4070 SYMBOL 140,0,0,224,160,224,160,160,
0:'A
4080 SYMBOL 170,0,0,14,10,14,10,10,0:
    ' A
4090 SYMBOL 141,0,0,192,160,192,160,224,
0:'B
4100 SYMBOL 171,0,0,12,10,12,10,14,0:
```

```
 ' B
4110 SYMBOL 142,0,0,224,128,128,128,224,
0:'C
4120 SYMBOL 172,0,0,14,8,8,8,14,0:
 ' C
4130 SYMBOL 143,0,0,192,160,160,160,224,
0:'D
4140 SYMBOL 173,0,0,12,10,10,10,14,0:
 ' D
4150 SYMBOL 144,0,0,224,128,192,128,224,
0:'E
4160 SYMBOL 174,0,0,14,8,12,8,14,0:
 ' E
4170 SYMBOL 145,0,0,224,128,192,128,128,
0:'F
4180 SYMBOL 175,0,0,14,8,12,8,8,0:
 ' F
4190 SYMBOL 146,0,0,224,128,160,160,224,
0:'G
4200 SYMBOL 176,0,0,14,8,10,10,14,0:
 ' G
4210 SYMBOL 147,0,0,160,160,224,160,160,
0:'H
4220 SYMBOL 177,0,0,10,10,14,10,10,0:
 ' H
4230 SYMBOL 148,0,0,224,64,64,64,224,0:
 'I
4240 SYMBOL 178,0,0,14,4,4,4,14,0:
 ' I
4250 SYMBOL 149,0,0,224,64,64,64,192,0:
 'J
4260 SYMBOL 179,0,0,14,4,4,4,12,0:
 ' J
4270 SYMBOL 150,0,0,160,192,192,160,160,
0:'K
4280 SYMBOL 180,0,0,10,12,12,10,10,0:
 ' K
4290 SYMBOL 151,0,0,128,128,128,128,224,
0:'L
4300 SYMBOL 181,0,0,8,8,8,8,14,0:
 ' L
4310 SYMBOL 152,0,0,160,224,160,160,160,
0:'M
4320 SYMBOL 182,0,0,10,14,10,10,10,0:
 ' M
4330 SYMBOL 153,0,0,160,224,224,224,160,
0:'N
4340 SYMBOL 183,0,0,10,14,14,14,10,0:
 ' N
4350 SYMBOL 154,0,0,224,160,160,160,224,
0:'O
4360 SYMBOL 184,0,0,14,10,10,10,14,0:
 ' O
4370 SYMBOL 155,0,0,224,160,224,128,128,
0:'P
4380 SYMBOL 185,0,0,14,10,14,8,8,0:
 ' P
4390 SYMBOL 156,0,0,224,160,160,160,224,
32:'Q
4400 SYMBOL 186,0,0,14,10,10,10,14,2:
 ' Q
4410 SYMBOL 157,0,0,224,160,224,192,160,
0:'R
4420 SYMBOL 187,0,0,14,10,14,12,10,0:
 ' R
4430 SYMBOL 158,0,0,224,128,224,32,224,0
: 'S
4440 SYMBOL 188,0,0,14,8,14,2,14,0:
 ' S
4450 SYMBOL 159,0,0,224,64,64,64,64,0:
 'T
4460 SYMBOL 189,0,0,14,4,4,4,4,0:
 ' T
4470 SYMBOL 160,0,0,160,160,160,160,224,
0:'U
4480 SYMBOL 190,0,0,10,10,10,10,14,0:
 ' U
4490 SYMBOL 161,0,0,160,160,160,224,64,0
: 'V
4500 SYMBOL 191,0,0,10,10,10,14,4,0:
 ' V
4510 SYMBOL 162,0,0,160,160,160,224,160,
0:'W
4520 SYMBOL 192,0,0,10,10,10,14,10,0:
 ' W
4530 SYMBOL 163,0,0,160,160,64,160,160,0
: 'X
4540 SYMBOL 193,0,0,10,10,4,10,10,0:
 ' X
4550 SYMBOL 164,0,0,160,224,64,64,64,0:
 'Y
4560 SYMBOL 194,0,0,10,14,4,4,4,0:
 ' Y
4570 SYMBOL 165,0,0,224,32,64,128,224,0:
 'Z
4580 SYMBOL 195,0,0,14,2,4,8,14,0:
 ' Z
4590 SYMBOL 33,255,255,255,255,255,255,2
55,255:'plein
4600 SYMBOL 166,20,20,60,52,255,231,60,6
0:'camelaser
4610 SYMBOL 167,255,24,0,24,0,24,0,24:'t
able
4620 GOSUB 6350:GOTO 110
4630 '*********************************
     *                               *
     *       CONVERTIT LES LETTRES   *
     *                               *
     *********************************
4640 texte=INT(LEN(texte$)/24)+1
4650 INK 3,0
4660 FOR j=1 TO texte
4670 text$=MID$(texte$,(J*24)-23,24)
4680 GOSUB 4730
4690 TY=TY+1
4700 NEXT J
4710 INK 3,20:INK 4,24
4720 RETURN
4730 TEXT=LEN(TEXT$)
4740 INK 4,0
4750 IF TEXT/2<>INT(TEXT/2) THEN TEXT$=T
EXT$+" ":GOTO 4730
4760 TEX1$="":TEX2$=""
4770 FOR I=1 TO TEXT STEP 2
4780 TEX1=ASC(MID$(TEXT$,I,1))
4790 TEX2=ASC(MID$(TEXT$,I+1,1))
4800 IF TEX1=32 THEN TEX1=-43
4810 IF TEX2=32 THEN TEX2=-73
4820 TEX1$=TEX1$+CHR$(TEX1+75)
4830 TEX2$=TEX2$+CHR$(TEX2+105)
4840 NEXT I
4850 PRINT CHR$(22)+CHR$(1);
4860 LOCATE TX,TY:PRINT TEX1$;
4870 LOCATE TX,TY:PRINT TEX2$;
4880 PRINT CHR$(22)+CHR$(0);
4890 RETURN
4900 '***         tableau 13          **
4910 TEX=(INT(RND*2)+1)*6:tx=7
4920 LOCATE tx,tex:PEN 14
4930 PRINT CHR$(167);
4940 LOCATE tx,TEX-1:PEN 8
4950 PRINT CHR$(196);
4960 PRINT CHR$(22)+CHR$(1);
4970 INK 8,0,6
4980 FOR j=2 TO 13
4990 PEN 14:LOCATE j,7:PRINT CHR$(33);
5000 PEN 11:LOCATE j,7:PRINT CHR$(1)+CHR
$(24);
5010 PEN 14:LOCATE j,13:PRINT CHR$(33);
5020 PEN 11:LOCATE j,13:PRINT CHR$(1)+CH
R$(24);
5030 NEXT j
5040 EVERY 100,0 GOSUB 7510
5050 FOR i=4 TO 10 STEP 3
5060 LOCATE i,1:PEN 10:PRINT CHR$(197);:
LOCATE i,8:PRINT CHR$(197);
5070 LOCATE i,1:PEN 9:PRINT CHR$(198);:L
OCATE i,8:PRINT CHR$(198);
5080 NEXT i
5090 FOR j=1 TO 13
5100 LOCATE 1,j:PEN 15:PRINT CHR$(33);
5110 LOCATE 14,j:PRINT CHR$(33);
5120 NEXT j
5130 LOCATE 2,6:PEN 2:PRINT CHR$(166);
5140 LOCATE 13,6:PRINT CHR$(166);
5150 GOSUB 7670:h=REMAIN(2)
5160 FOR cam=0 TO 3
5170 xcam=INT(RND*4)+1
5180 ycam=(INT(RND*3)+1)+(cam*3)
5190 IF xcam=gpo AND ycam=gpa THEN EVERY
 100,2 GOSUB 7540
5200 xcam(cam)=xcam:ycam(cam)=ycam
5210 NEXT cam
5220 GOSUB 7660
5230 PEN 1
5240 PRINT CHR$(22)+CHR$(0);
5250 RETURN
```

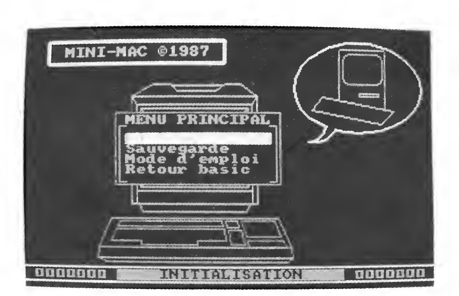
```
5260 '***          tableau 14               **
5270 tex=6:tx=8
5280 LOCATE tx,tex:PEN 14
5290 PRINT CHR$(167);
5300 LOCATE tx,tex-1:PEN 8
5310 PRINT CHR$(196);
5320 GOSUB 4960
5330 PEN 0:LOCATE 6,7:PRINT"  ";
5340 LOCATE 6,8:PRINT"  ";
5350 RETURN
5360 '***          tableau 15               **
5370 TEX=6:tx=7
5380 LOCATE tx,tex:PEN 14
5390 PRINT CHR$(167);
5400 PEN 8:LOCATE tx,tex-1
5410 PRINT CHR$(196);
5420 GOSUB 4960
5430 PEN 0:LOCATE 8,7:PRINT"  ";
5440 LOCATE 8,8:PRINT"  ";
5450 RETURN
5460 '***          tableau 16               **
5470 tex=6:tx=8
5480 LOCATE tx,tex:PEN 14
5490 PRINT CHR$(167);
5500 PEN 8:LOCATE tx,tex-1
5510 PRINT CHR$(196);
5520 GOSUB 4960
5530 PEN 0:LOCATE 4,7:PRINT"  ";:LOCATE
10,7:PRINT"  ";
5540 LOCATE 4,8:PRINT"  ";:LOCATE 10,8:P
RINT"  ";
5550 RETURN
5560 '***          tableau 01               **
5570 GOSUB 4910
5580 PEN 9:FOR i=1 TO 13:LOCATE 1,i:PRIN
T CHR$(207);:NEXT i
5590 RETURN
5600 '***          tableau 02               **
5610 GOSUB 5270
5620 GOSUB 5580
5630 RETURN
5640 '***          tableau 03               **
5650 GOSUB 5470
5660 GOSUB 5580
5670 RETURN
5680 '***          tableau 04               **
5690 GOSUB 4910
5700 PEN 9:FOR i=1 TO 13:LOCATE 14,i:PRI
NT CHR$(207);:NEXT i
5710 RETURN
5720 '***          tableau 05               **
5730 GOSUB 5370
5740 GOSUB 5700
5750 RETURN
5760 '***          tableau 06               **
5770 GOSUB 5470
5780 GOSUB 5700
5790 RETURN
5800 '***          tableau 07               **
5810 GOSUB 4910
5820 GOSUB 5580
5830 GOSUB 5700
5840 RETURN
5850 '***          tableau 08               **
5860 GOSUB 5320
5870 TEX=12:tx=7
5880 LOCATE tx,tex:PEN 14
5890 PRINT CHR$(167);
5900 PEN 8:LOCATE tx,tex-1
5910 PRINT CHR$(196);
5920 PRINT CHR$(22)+CHR$(1);
5930 FOR j=8 TO 12
5940 PEN 14:LOCATE 8,j:PRINT CHR$(33);
5950 PEN 11:LOCATE 8,j:PRINT CHR$(1)+CHR
$(24);
5960 NEXT j
5970 PRINT CHR$(22)+CHR$(0);
5980 GOSUB 5820
5990 RETURN
6000 '***          tableau 09               **
6010 GOSUB 5270
6020 GOSUB 5820
6030 RETURN
6040 '***          tableau 10               **
6050 GOSUB 5420
6060 TEX=12:tx=8
6070 LOCATE tx,tex:PEN 14
6080 PRINT CHR$(167);
6090 PEN 8:LOCATE tx,tex-1
6100 PRINT CHR$(196);
6110 PRINT CHR$(22)+CHR$(1);
6120 FOR j=8 TO 12
6130 PEN 14:LOCATE 6,j:PRINT CHR$(33);
6140 PEN 11:LOCATE 6,j:PRINT CHR$(1)+CHR
$(24);
6150 NEXT j
6160 PRINT CHR$(22)+CHR$(0);
6170 GOSUB 5820
6180 RETURN
6190 '***          tableau 11               **
6200 GOSUB 5370
6210 GOSUB 5820
6220 RETURN
6230 '***          tableau 12               **
6240 GOSUB 5470
6250 GOSUB 5820
6260 RETURN
6270 '**********************************
     *                                *
     *      affichage du score        *
     *                                *
     **********************************
6280 SC=SC+INT((TEMPS-106)/4)+(TEL*TIM)
6290 IF sc<0 THEN sc=0
6300 LOCATE#2,1,1:PRINT#2,USING"#######
#";sc;
6310 IF sc>record THEN record=sc:LOCATE#
2,1,2:PRINT#2,USING"#########";record;
6320 TEL=0:
6330 RETURN
6340 '**********************************
     *                                *
     *     DISTRIBUE LES LETTRES      *
     *                                *
     **********************************
6350 DIM NT$(12,4),NT(12,4),PH$(48)
6360 pd$=STRING$(48,32)
6370 READ phc$
6380 PHC=LEN(PHC$)
6390 PHC$=PHC$+STRING$(48-PHC,32)
6400 IF PHC/2=INT(PHC/2) THEN PHC1=PHC E
LSE PHC1=PHC+1
6410 PHC1$=MID$(PHC$,1,PHC1):PC$=PHC1$
6420 PHC=48
6430 FOR I=1 TO 12:FOR J=1 TO 4:NT(I,J)=
0:NEXT J,I
6440 FOR PH=1 TO PHC
6450 PH$(PH)=MID$(PHC$,PH,1)
6460 NEXT PH
6470 FOR NSA=1 TO 12
6480 FOR NSO=1 TO 4
6490 NT=INT(RND*PHC)+1
6500 NT$(NSA,NSO)=PH$(NT)
6510 WHILE NT<PHC
6520 PH$(NT)=PH$(NT+1)
6530 NT=NT+1
6540 WEND
6550 PHC=PHC-1
6560 NEXT NSO
6570 NEXT NSA
6580 RETURN
6590 END
6600 '**********************************
     *                                *
     *        PHRASES CACHEES         *
     *                                *
     **********************************
6610 DATA "L HOMME EST CONDAMNE A ETRE L
IBRE"
6620 DATA "ETRE CONTESTE   C EST ETRE CO
NSTATE"
6630 DATA "ON  N AIME PLUS PERSONNE  DES
 QU ON AIME"
6640 DATA "LA SINGULARITE EST DANGEREUSE
 EN    TOUT"
6650 DATA "TOUT CE QUI EST PLUS EST INFI
NIMENT MOINS QU UN"
6660 DATA "LA MORALE EST LA FAIBLESSE DE
 LA    CERVELLE"
6670 DATA "   GOUVERNER     C EST CHOISI
R"
6680 DATA "BOHEMIENS  VOUS AVEZ EMPORTE
TOUS LES ENFANTS"
6690 '**********************************
     *                                *
     *     reconstitue la phrase      *
     *                                *
```

```
    **********************************
6700 IF tim=0 THEN GOTO 6880
6710 GOSUB 1890
6720 TAGOFF
6730 INK 8,6
6740 PRINT CHR$(22)+CHR$(1);
6750 LOCATE tx,tex-1:PEN 0::PRINT CHR$(1
96);
6760 gao=ASC(NT$(GPa,GPO))
6770 IF gao=32 THEN gao=0 ELSE gao=32
6780 LOCATE tx,tex-1:PEN 8:PRINT CHR$(AS
C(NT$(GPa,GPO))+gao);
6790 WHILE INKEY$<>"":WEND
6800 IF INKEY(0)=-1 AND INKEY(2)=-1 THEN
 6800
6810 IF INKEY(2)=-1 THEN fe=1
6820 LOCATE tx,tex-1:PEN 0:PRINT CHR$(AS
C(NT$(GPa,GPO))+gao);
6830 LOCATE tx,tex-1:PEN 8:PRINT CHR$(19
6);
6840 PRINT CHR$(22)+CHR$(0);
6850 TAG
6860 GOSUB 1890
6870 IF fe=1 THEN fe=0:RETURN
6880 i=1
6890 h$=MID$(PC$,I,1)
6900 IF H$<>NT$(GPA,GPO) THEN 7070
6910 PC$=MID$(PC$,1,I-1)+"0"+RIGHT$(PC$,
PHC1-I)
6920 PD$=LEFT$(PD$,I-1)+H$+RIGHT$(PD$,PH
C1-I)
6930 PD1$="":PD2$=""
6940 FOR ci=1 TO PHC1 STEP 2
6950 h1=ASC(MID$(pd$,ci,1))
6960 h2=ASC(MID$(pd$,ci+1,1))
6970 IF h1=32 THEN h1=-43
6980 IF h2=32 THEN h2=-73
6990 pd1$=pd1$+CHR$(h1+75)
7000 pd2$=pd2$+CHR$(h2+105)
7010 NEXT ci
7020 PRINT#3,CHR$(22)+CHR$(1);:PEN#3,1
7030 LOCATE#3,1,2:PRINT#3,pd1$
7040 LOCATE#3,1,2:PRINT#3,pd2$
7050 PRINT#3,CHR$(22)+CHR$(0);
7060 GOSUB 7110:RETURN
7070 i=i+1:IF i=PHC1+1 THEN 7080 ELSE GO
TO 6890
7080 TEL=-10*(ASC(NT$(GPA,GPO))):RETURN
7090 '**********************************
    *                                  *
    *    VERIFICATION DE LA PHRASE     *
    *                                  *
    **********************************
7100 H=REMAIN(0):GOSUB 1890:GOSUB 7110:T
IM=1:GOTO 7130
7110 IF PD$=PHC1$ THEN GOTO 7120 ELSE RE
TURN
7120 TAGOFF:WINDOW#0,2,13,11,17:CLS:text
e$="BRAVO                  VOUS AVEZ BI
EN JOUE     MAIS SAUREZ VOUS TROUVER LA
PROCHAINE PHRASE":TX=1:TY=5:GOSUB 4640:G
OTO 7340
7130 TAGOFF
7140 CLS
7150 WINDOW#0,1,20,7,19
7160 text$="REGLES DU JEU":TX=4:TY=2:PEN
 2:GOSUB 4730
7170 TEXT$="ENFONCEZ UNE TOUCHE":PEN 4:T
X=3:TY=13:GOSUB 4730
7180 WINDOW#0,2,13,11,17
7190 TEXTE$=" LE TEMPS QUI VOUS ETAITIMP
ARTI EST ECOULE       VOUS ALLEZ DEVOIR
ALLERCHERCHER LES LETTRES QUI VOUS MANQU
ENT"
7200 TX=1:TY=1:PEN 3:GOSUB 4640:GOSUB 77
60
7210 IF PARTIE=2 THEN GOTO 7250
7220 TEXTE$=" QUAND VOUS REPONDREZ AUTEL
EFON UNE LETTRE IRA  S AFFICHER A LA PLA
CE DUTELEFON                  VOUS POURR
EZ LA GARDER OU LA JETER             C
EST A VOUS DE CHOISIR":TX=1:TY=1:GOSUB 4
640:GOSUB 7760
7230 TEXTE$=" SI VOUS VOULEZ GARDER  LA
LETTRE APPUYEZ SUR LAFLECHE QUI DESCEND
      SI VOUS VOULEZ JETER LALETTRE APPU
YEZ SUR LA   FLECHE QUI MONTE":TX=1:TY=1
:GOSUB 4640:GOSUB 7760
7240 TEXTE$=" FAITES LE BON CHOIX OU VOU
S PERDREZ LES POINTS QUE VOUS AUREZ GAGN
ES   AUPARAVANT":TX=1:TY=2:GOSUB 4640:GO
SUB 7760
7250 WINDOW#0,1,14,7,19:CLS
7260 GOSUB 6420
7270 GOTO 1080
7280  **********************************
    *                                  *
    *           TEST DE FIN            *
    *                                  *
    **********************************
7290 TAGOFF
7300 CLS
7310 h=(REMAIN(0) AND REMAIN(1) AND REMA
IN(2))
7320 WINDOW#0,2,13,11,17:CLS
7330 SPEED KEY 10,7
7340 texte$=" VOULEZ VOUS REJOUER UNEAUT
RE PARTIE              O   POUR  OUI
       N   POUR NON          FAITES VOTR
E CHOIX":TX=1:TY=1:PEN 3:GOSUB 4640
7350 WHILE INKEY$<>"":WEND:CALL &BB06
7360 que$=INKEY$:IF que$="" THEN 7360
7370 IF que$<>"o" AND que$<>"O" THEN GOT
O 7740
7380 WINDOW#3,2,19,21,24
7390 CLS#3
7400 TIM=0
7410 PARTIE=PARTIE+1:IF PARTIE=6 THEN PA
RTIE=1:RESTORE
7420 RECORD=SC
7430 LOCATE#2,1,2:PRINT#2,USING"########
#";record;
7440 LOCATE#2,1,1:PRINT#2,USING"########
#";sc;
7450 times=0
7460 GOSUB 6360
7470 GOSUB 3820
7480 CLS:GOTO 550
7490 '**********************************
    *                                  *
    *              times               *
    *                                  *
    **********************************
7500 times=times+1:RETURN
7510 '**********************************
    *                                  *
    *              SOUND               *
    *                                  *
    **********************************
7520 SOUND 1,150,25,5:RETURN
7530 '**********************************
    *                                  *
    *              LASER               *
    *                                  *
    **********************************
7540 CHOX(1)=&E378:CHOX(2)=&E39F
7550 CHO=INT(RND*2)+1
7560 IF CHO=1 THEN CHA=1 ELSE CHA=-1
7570 FOR CHOX=CHOX(CHO) TO CHOX(CHO+CHA)
 STEP CHA
7580 IF PEEK(CHOX)>3 THEN condi=1:RETURN
7590 POKE CHOX,255
7600 SOUND 3,CHOX-&E377,1
7610 NEXT
7620 FOR CHOX=CHOX(CHO) TO CHOX(CHO+CHA)
 STEP CHA
7630 POKE CHOX,0
7640 NEXT
7650 RETURN
7660 '**********************************
    *                                  *
    *             CAMERAS              *
    *                                  *
    **********************************
7670 PRINT CHR$(23)+CHR$(1);
7680 FOR cir=0 TO 3
7690 PLOT 456+(xcam(cir)*32),186-(ycam(c
ir)*16),2
7700 PLOT 468+(xcam(cir)*32),186-(ycam(c
ir)*16),2
7710 NEXT cir
7720 RETURN
7730 '**********************************
7740 SPEED KEY 10,7:SYMBOL AFTER 32:END
7750 '**********************************
7760 WHILE INKEY$<>"":WEND:CALL &BB06:CL
S:RETURN
```

MINI-MAC

Patrice JACQUES

Mini-mac est un éditeur-gestionnaire de menus déroulants. La première partie de cet utilitaire est une routine en langage machine utilisable grâce à la RSX IMenu,No,X,Y. La seconde partie est un éditeur en Basic pour composer les textes des menus (10 menus maximum numérotés de 0 à 9).



En tant que mode d'emploi, nous allons simuler une petite application qui vous permettra, par l'exemple, d'utiliser mini-mac. Soyons modeste, ce sera une petite calculatrice 4 opérations. Le menu principal comportera donc les options addition, soustraction, multiplication, division et Quitter.
Un second menu de confirmation apparaitra si "quitter" est validé et présentera les options "confirmation" et "annulation".
Avant d'utiliser ces menus, vous allez les créer au moyen de l'éditeur de mini-mac (au lancement du programme, c'est bien sûr l'option EDITEUR du menu principal).
Notre menu No 0 ayant un titre, pressez "espace" puis "enter" pour valider votre choix. A la question titre, répondez CALCULETTE. Ensuite, remplissez le nom des cinq options comme convenu. Pour indiquer que le menu No 0 est achevé, pressez Q majuscule (suivi de "enter"). Le texte de menu est terminé.

Mini-mac va alors vous indiquer sa surface. En effet, vous avez remarqué qu'un menu déroulant n'altère pas le contenu de l'écran à sa fermeture car il sauvegarde dans un buffer ce qui se trouve à l'endroit où il va apparaître, puis le restitue à sa fermeture.
De ce fait, plus la surface des menus est grande et plus la routine nécessite de mémoire pour fonctionner.
Le programme vous demande ensuite le mode écran MAXIMUM dans lequel vous afficherez votre menu et ce, pour la même raison, car en mode 0 la surface est 4 fois supérieure au mode 2. En cas de doute, mettez le mode 0 car si vous consommez plus de place qu'il n'y en a de réservée, la routine sera écrasée par le buffer de sauvegarde et votre CPC plantera !!!
Pour le menu No 1, procédez de la même façon en ne mettant pas de titre. Pour les deux menus, vous choisirez 2 comme mode écran MAXIMUM (j'insiste). Pour quitter l'éditeur, pressez la touche F et vous reviendrez au menu principal.
L'édition étant terminée, passez à la sauvegarde de votre travail. C'est grâce à cette opération que vous pourrez utiliser les menus dans vos applications personnelles.
En premier lieu, un écran vous décrira l'occupation mémoire de la routine et l'espace utile en fonctionnement. Un menu vous demandera alors confirmation de la sauvegarde. Si vous êtes OK, elle sera effectuée. Un autre écran vous indiquera deux lignes BASIC que vous devrez IMPERATIVEMENT insérer au début de votre programme.

Utilisation de IMENU, No, X, Y

Vous allez enfin pouvoir écrire votre programme en suivant ces quelques directives. Tout d'abord, recopiez les deux lignes Basic qui ont été affichées à la fin de la sauvegarde (et encore une fois pensez à passer en mode 2 avant RUN).

```
10 CLEAR:MEMORY &A1ED:LOAD"IMENUS.BIN"
20 CHOIX%=0:CALL &A270,@CHOIX%
On affiche le menu No 0 aux coordonnées 10,14
30 IMENU,0,10,14
Test de la réponse dans CHOIX%
40 ON CHOIX% GOTO 50,60,70,80,90
Addition
50 INPUT A:INPUT B:PRINT A+B:GOTO 30
Soustraction
60 INPUT A:INPUT B:PRINT A-B:GOTO 30
Multiplication
70 INPUT A:INPUT B:PRINT A*B:GOTO 30
Division
80 INPUT A:INPUT B:PRINT A/B:GOTO 30
Quitter (on affiche le menu No 1 en X=14 et Y=15)
90 IMENU,1,14,15:IF CHOIX%=2 THEN GOTO 30 ELSE END
```

Vous êtes maintenant prêt à utiliser MINI-MAC. Bon courage !

```
1000 '************************
1010 '**  JACQUES Patrice   **
1020 '*      presente:       *
1030 '**   M i n i - M a c  **
1040 '************************
1050 '
1060 'Listing No 1
1070 '
1080 '
1090 '
1100 MODE 1:BORDER 14:INK 0,0:INK 1,14:INK 2,18:INK 3,6:GOSUB 1310:CLEAR
1110 PEN 3:LOCATE 3,2:PRINT CHR$(150)STRING$(16,154)CHR$(156)
1120 PEN 2:LOCATE 5,3:PRINT"MINI-MAC "CHR$(164)"1987"
1130 PEN 3:LOCATE 3,3:PRINT CHR$(149):LOCATE 20,3:PRINT CHR$(149)
1140 LOCATE 3,4:PRINT CHR$(147)STRING$(16,154)CHR$(153)
1150 MOVE 0,13:DRAWR 639,0,3:MOVE 0,35:DRAWR 639,0
1160 MOVE 0,0:DRAW 0,399,3:DRAW 639,399:DRAW 639,0:DRAW 0,0
1170 PEN 2:LOCATE 2,24:PRINT STRING$(7,232)STRING$(24,32)STRING$(7,232)
1180 EVERY 10 GOSUB 1770
1190 WINDOW#1,14,20,11,14:PRINT#1,"Penses";:PRINT#1,"de CPC."
1200 FOR I=1 TO 500:NEXT
1210 PEN 1:LOCATE 9,24:PRINT " Avant j'etais moche... ":FOR Z=1 TO 750:NEXT Z
1220 MES$="Avant j'etais moche... Maintenant c'est fini. Je deroule les menus comme tout le monde avec la simplicite en prime !!! "
1230 GOSUB 1550
1240 FOR I=1 TO LEN(MES$):LOCATE 10,24:PRINT MID$(MES$,I,22):FOR Z=1 TO 60
1250 NEXT:NEXT
1260 IF INKEY$<>"" THEN GOTO 1270
1270 CLS#1:PRINT#1,"Charge-";:PRINT#1,"ment en";:PRINT#1,"cours.":PEN 1
1280 LOCATE 9,24:PRINT " X Veuillez patienter  X"
1290 LOCATE 1,20
1300 RUN"!MAIN.BAS"
1310 REM DESSIN DU CLAVIER DU CPC
1320 MOVE 114,48:DRAW 416,48,2:DRAW 414,65:DRAW 116,65:DRAW 114,48
1330 MOVE 116,48:DRAW 126,42:DRAW 408,42:DRAW 416,48
1340 MOVE 116,65:DRAW 136,108:DRAW 394,108:DRAW 414,65
1350 MOVE 150,104:DRAW 306,104,1:DRAW 308,96:DRAW 146,96:DRAW 150,104
1360 MOVE 144,92:DRAW 310,92:DRAW 312,74:DRAW 268,74:DRAW 268,69
1370 DRAW 182,69:DRAW 182,74:DRAW 136,74:DRAW 144,92
1380 MOVE 316,90:DRAW 336,90:DRAW 343,68:DRAW 320,68:DRAW 316,90
1390 MOVE 337,104:DRAW 388,104:DRAW 398,80:DRAW 344,80:DRAW 337,104
1400 MOVE 348,66:DRAW 346,74:DRAW 402,74:DRAW 406,66
1410 MOVE 312,104:DRAW 330,104:DRAW 332,94:DRAW 314,94:DRAW 312,104
1420 REM DESSIN DE L'ECRAN DU CPC
1430 MOVE 168,294:DRAW 362,294,2:DRAW 362,130:DRAW 168,130:DRAW 168,294
1440 MOVE 176,130:DRAW 176,282:DRAW 354,282:DRAW 354,130
1450 MOVE 168,294:DRAW 176,282:MOVE 362,294:DRAW 354,282
1460 MOVE 168,294:DRAW 200,312:DRAW 228,312:DRAW 238,302:DRAW 298,302
1470 DRAW 312,312:DRAW 336,312:DRAW 362,294:MOVE 232,310:DRAW 306,310
1480 MOVE 182,276:DRAW 348,276:DRAW 348,156:DRAW 182,156:DRAW 182,276
1490 MOVE 194,266:DRAW 336,266,1:DRAW 336,168:DRAW 194,168:DRAW 194,266
1500 MOVE 182,276:DRAW 194,266,2:MOVE 348,276:DRAW 336,266
1510 MOVE 348,156:DRAW 336,168:MOVE 182,156:DRAW 194,168
1520 MOVE 176,150:DRAW 354,150
1530 MOVE 180,130:DRAW 184,118:DRAW 344,118:DRAW 350,130
1540 RETURN
1550 REM DESSIN DU MACINTOSH
1560 GOSUB 1660
1570 MOVE 490,292:DRAW 490,362,2:MOVE 492,364:DRAW 560,364
1580 MOVE 562,362:DRAW 562,278
1590 MOVE 464,294:DRAW 576,274:DRAW 556,254:DRAW 448,274:DRAW 464,294
1600 MOVE 522,300:DRAW 552,300:DRAW 552,296:DRAW 522,296:DRAW 522,300
1610 MOVE 504,358:DRAW 550,358,1:MOVER 2,-2:DRAWR 2,0:MOVER 2,-2:DRAWR 0,-2
1620 MOVER 2,-2:DRAWR 0,-28:MOVER -2,-2:DRAWR 0,-2:MOVER -2,-2:DRAWR -2,0
1630 MOVER -2,-2:DRAWR -46,0:MOVER -2,2:DRAWR -2,0:MOVER -2,2:DRAWR 0,2
1640 MOVER -2,2:DRAWR 0,28:MOVER 2,2:DRAWR 0,2:MOVER 2,2:DRAWR 2,0
1650 RETURN
1660 REM DESSIN DE LA BULLE
1670 DEG:X=520:Y=308:R=100:PLAT=1.5:DEB=250:FIN=600:GOSUB 1710
1680 X=440:Y=256:R=30:PLAT=1:DEB=275:FIN=350:GOSUB 1710
1690 X=452:Y=258:R=35:PLAT=1.1:DEB=270:FIN=340:GOSUB 1710
1700 RETURN
1710 REM TRACE CERCLES/ELLIPSES
1720 PLOT X+R*COS(DEB),Y+R*SIN(DEB),0
1730 FOR I=DEB TO FIN STEP 10
1740 X1=X+R*COS(I):Y1=Y+R*SIN(I)/PLAT
1750 DRAW X1,Y1:PLOT X1,Y1,3
1760 NEXT I:RETURN
1770 IF INKEY$=" " THEN GOTO 1270 ELSE RETURN
```

```
1000 '************************
1010 '**  JACQUES Patrice   **
1020 '*      presente:       *
1030 '**   M i n i - M a c  **
1040 '************************
1050 '
1060 'Listing No 2
1070 '
1080 '
1090 '-----------------------------------
1100 'Initialisation et implantation du
      code objet
1110 '-----------------------------------
1120 MEMORY &8FFF:BORDER 14,15:CLEAR:CLS#1:PRINT#1," Phase":PRINT#1," No 01"
1130 LOCATE 9,24:PRINT " X    INITIALISATION    X"
1140 GOSUB 3350:CLS#1:PRINT#1," Phase":PRINT#1," No 02":GOSUB 4100
1150 K1$="X PAS DE TITRE X   Titre ":K2$=" Pas de titre   X TITRE X":BORDER 15
1160 DIM M$(9,17):C%=0:CALL &A270,@C%:ZZ$=STRING$(40,46)
1170 |MENU,0,10,9:ON C% GOTO 1180,1240,1680,2550
1180 '----------------------------
1190 'Editeur des menus deroulants
1200 '----------------------------
1210 MODE 2:INK 0,15:INK 1,0:FOR I%=0 TO 9:FOR J%=0 TO 17:M$(I%,J%)=ZZ$:NEXT
1220 NEXT:FLAG%=1:GOSUB 3000
1230 GOTO 1170
1240 '-----------------------------------
1250 'Option de Sauvegarde des donnees
      et de la routine
1260 '-----------------------------------
1270 |MENU,5,6,10:ON C% GOTO 1320,1280
1280 MODE 2:INK 0,15:INK 1,0:GOSUB 3270:LOCATE 9,1:PRINT"MINI-MAC X Sauvegar";
1290 PRINT"de X MINI-MAC":MOVE 60,380:DRAWR 511,0:LOCATE 55,1
1300 PRINT"Catalogue drive A":WINDOW 12,72,6,20:CAT:CALL &BB06
1310 WINDOW 1,80,1,25:GOTO 1170
1320 MODE 2:INK 0,15:INK 1,0:GOSUB 3270:LOCATE 9,1:PRINT"MINI-MAC X Sauvegar";
1330 PRINT"de X MINI-MAC":MOVE 60,380:DRAWR 511,0:LOCATE 54,1
1340 PRINT"Sauvegarde routine":GOSUB 3270:IF FLAG% THEN 1350 ELSE GOTO 2600
1350 LOCATE 14,9:PRINT"Implantation de la routine assembleur de &A250 a &A650"
1360 F%=0:FOR M%=0 TO 9:F%=F%+3
1370 IF T%(M%)=1 THEN F%=F%+LEN(M$(M%,0))+1
1380 FOR I%=1 TO N%(M%)
1390 F%=F%+LEN(M$(M%,I%))+1
1400 NEXT I%:F%=F%+1:NEXT M%
1410 LOCATE 11,11:PRINT"Implantation du texte des menus deroulants de &"HEX$((&A
```

```
26F-F%))" a &A26F."
1420 LOCATE 8,13:PRINT"Localisation du b
uffer de sauvegarde de l'ecran de &"HEX$
(&A26E-F%-BUFFER%)" a &"HEX$(&A26F-F%)".
":MEMO%=(&A26E-F%-BUFFER%)
1430 LOCATE 19,15:PRINT"Consommation de
memoire vive des menus : &"HEX$(&A670-(&
A26E-F%-BUFFER%)):LOCATE 9,6:CALL &BB06
1440 PRINT"I AVERTISSEMENT: Cette option
 aboutie sur un RESET de l'Amstrad I"
1450 FOR H%=1 TO 3000:NEXT:|MENU,6,14,13
:ON C% GOTO 1170,1460
1460 LOCATE 24,19:PRINT"I REORGANISATION
 DE L'ESPACE MEMOIRE I"
1470 AD%=&A26F-F%:A1%=&A654:DEB%=AD%
1480 FOR M%=0 TO 9:ADT%(M%)=AD%:POKE AD%
,LAR%(M%):POKE AD%+1,T%(M%):POKE AD%+2,N
%(M%):AD%=AD%+3
1490 POKE A1%,ADT%(M%)-(256*(INT(ADT%(M%
)/256)))
1500 POKE A1%+1,INT(ADT%(M%)/256-(&FF00)
):A1%=A1%+2
1510 IF T%(M%)=1 THEN FOR J%=1 TO LEN(M$
(M%,0)):POKE AD%,ASC(MID$(M$(M%,0),J%,1)
):AD%=AD%+1:NEXT J%:POKE AD%,0:AD%=AD%+1
1520 FOR I%=1 TO N%(M%)
1530 FOR J%=1 TO LEN(M$(M%,I%)):POKE AD%
,ASC(MID$(M$(M%,I%),J%,1)):AD%=AD%+1:NEX
T J%:POKE AD%,0:AD%=AD%+1
1540 NEXT:POKE AD%,&FF:AD%=AD%+1:NEXT
1550 POKE &A652,MEMO%-(256*(INT(MEMO%/25
6)))
1560 POKE &A653,INT(MEMO%/256-(&FF00))
1570 LOCATE 24,19:PRINT"I           SAUVEGA
RDE EN COURS          I"
1580 SAVE "!MENUS.BIN",b,DEB%,&A670-DEB%
1590 MODE 2:INK 0,20:INK 1,0:GOSUB 3270:
LOCATE 9,1:PRINT"MINI-MAC I Sauvegar";
1600 PRINT"de I MINI-MAC":MOVE 60,380:DR
AWR 511,0:LOCATE 69,1:PRINT"Fin"
1610 WINDOW 12,72,6,20:PRINT"Pour que vo
us puissiez utiliser les menus deroulant
s dans"
1620 PRINT"vos propres applications, je
vous rappelle que vous devrez"
1630 PRINT"y incorporer les 2 lignes sui
vantes:":PRINT:PRINT
1640 PRINT:PRINT"          10 CLEAR:MEMO
RY &"HEX$(DEB%-1)":LOAD"CHR$(34)"!MENUS.
BIN"CHR$(34)
1650 PRINT"          20 CHOIX%=0:CALL &A
270,@CHOIX%":PRINT:PRINT:PRINT:PRINT
1660 PRINT:PRINT"            I Pressez
une touche pour finir I"
1670 CALL &BB06:CALL 0
1680 '----------------------
1690 'Mode d'emploi detaille
1700 '----------------------
1710 |MENU,1,13,13:IF C%=2 THEN W%=8 ELS
E W%=1
1720 IF W%=1  THEN MODE 2:INK 0,15:INK 1
,0:WINDOW#1,9,71,1,25
1730 PRINT#W%,"                          M
ODE D'EMPLOI":PRINT#W%:PRINT#W%
1740 PRINT#W%,"     Mini-mac est un edit
eur-gestionnaire de menus deroulants."
1750 PRINT#W%,"La premiere partie de cet
 utilitaire est une routine en langa-"
1760 PRINT#W%,"ge machine utilisable gra
ce a la rsx |MENU,No,X,Y. La seconde"
1770 PRINT#W%,"partie est un editeur en
basic pour composer les textes des"
1780 PRINT#W%,"menus (10 menus maximum n
umerotes de 0 a 9).":PRINT#W%
1790 PRINT#W%,"     En tant que mode d'e
mploi nous allons simuler une petite"
1800 PRINT#W%,"application qui vous perm
ettra par l'exemple d'utiliser mini-"
1810 PRINT#W%,"mac. Soyons modeste, ce s
era une petite calculatrice 4 opera-"
1820 PRINT#W%,"tions. Le menu principal
comportera donc les options addition,"
1830 PRINT#W%,"soustraction, multiplicat
ion, division et Quitter."
1840 PRINT#W%,"     Un second menu de co
nfirmation apparaitra si quitter est"
1850 PRINT#W%,"valide et presentera les
options confirmation et annulation."
1860 IF W%=8 THEN GOTO 1930 ELSE CALL &B
B06
1870 LOCATE 26,20:PRINT"I Voici l'aspect
 du menu No 0 I":|MENU,2,12,7
1880 LOCATE 25,20:PRINT"I Vous avez choi
si l'option No"STR$(C%)" I"
1890 CALL &BB06
1900 LOCATE 25,20:PRINT" I Voici l'aspec
t du menu No 1 I  ":|MENU,3,47,8
1910 LOCATE 25,20:PRINT"I Vous avez choi
si l'option No"STR$(C%)" I"
1920 CALL &BB06:IF W%=1 THEN CLS:LOCATE#
1,1,1
1930 PRINT#W%,"     Avant d'utiliser ces
 menus vous allez les creer au moyen"
1940 PRINT#W%,"de l'editeur de mini-mac
(au lancement du programme c'est bien"
1950 PRINT#W%,"sur l'option EDITEUR du m
enu principal).":PRINT#W%
1960 PRINT#W%,"     Notre menu No 0 ayan
t un titre, pressez espace puis enter"
1970 PRINT#W%,"pour valider votre choix.
 A la question titre, repondez"
1980 PRINT#W%,"CALCULETTE. Ensuite rempl
issez le nom des cinq options comme"
1990 PRINT#W%,"convenu. Pour indiquer qu
e le menu No 0 est acheve, pressez"
2000 PRINT#W%,"Q majuscule (suivi de ent
er). Le texte de menu est termine."
2010 PRINT#W%
2020 PRINT#W%,"     Mini-mac va alors vo
us indiquer sa surface. En effet vous"
2030 PRINT#W%,"avez remarque qu'un menu
deroulant n'altere pas le contenu de"
2040 PRINT#W%,"l'ecran a sa fermeture ca
r il sauvegarde dans un buffer ce qui"
2050 PRINT#W%,"se trouve ou il va appara
itre puis, le restitue a sa fermeture."
2060 PRINT#W%,"     De ce fait plus la s
urface des menus est grande et plus"
2070 PRINT#W%,"la routine necessite de m
emoire pour fonctionner.":PRINT#W%
2080 PRINT#W%,"     Le programme vous de
mande ensuite le mode ecran MAXIMUM"
2090 PRINT#W%,"dans lequel vous afficher
ez votre menu et ce pour la meme rai-"
2100 PRINT#W%,"son car en mode 0 la surf
ace est 4 fois superieure au mode 2"
2110 PRINT#W%,"En cas de doute mettez le
 mode 0 car si vous consommez plus de"
2120 PRINT#W%,"place qu il n'y en a de r
eservee, la routine sera ecrasee par"
2130 PRINT#W%,"le buffer de sauvegarde e
t votre CPC plantera !!!"
2140 CALL &BB06:IF W%=1 THEN CLS:LOCATE#
1,1,1
2150 PRINT#W%,"     Pour le menu No 1, p
rocedez de la meme facon en ne met-"
2160 PRINT#W%,"tant pas de titre. Pour l
es deux menus vous choisirez 2"
2170 PRINT#W%,"comme mode ecran MAXIMUM
(j'insiste). Pour quitter l'editeur,"
2180 PRINT#W%,"pressez la touche F et vo
us reviendrez au menu principal."
2190 PRINT#W%
2200 PRINT#W%,"     L'edition etant term
inee passez a la sauvegarde de vo-"
2210 PRINT#W%,"tre travail. C'est grace
a cette operation que vous pourrez"
2220 PRINT#W%,"utiliser les menus dans v
os applications personnelles."
2230 PRINT#W%
2240 PRINT#W%,"     En premier lieu, un
ecran vous decrira l'occupation"
2250 PRINT#W%,"memoire de la routine et
l'espace utile en fonctionnement."
2260 PRINT#W%,"Un menu vous demandera al
ors confirmation de la sauvegarde."
2270 PRINT#W%,"Si vous etes O.k, elle se
ra effectuee. Un autre ecran vous"
2280 PRINT#W%,"indiquera deux lignes BAS
IC que vous devrez IMPERATIVEMENT"
2290 PRINT#W%,"inserer au debut de votre
 programme.":PRINT#W%
2300 CALL &BB06:IF W%=1 THEN CLS:LOCATE#
1,1,1
2310 PRINT#W%,"               UTILISATI
ON DE |MENU,No,X,Y":PRINT#W%:PRINT#W%
2320 PRINT#W%,"     Vous allez enfin pou
```

```
voir ecrire votre programme en sui-"
2330 PRINT#W%,"vant ces quelques directi
ves. Tout d'abord recopiez les deux"
2340 PRINT#W%,"lignes Basic qui ont ete
affichees a la fin de la sauvegarde."
2350 PRINT#W%," (et encore une fois pen
sez a passer en mode 2 avant RUN)"
2360 PRINT#W%,"           10 CLEAR:MEMORY
&A1ED:LOAD"CHR$(34);
2370 PRINT#W%,"!MENUS.BIN"CHR$(34)
2380 PRINT#W%,"           20 CHOIX%=0:CAL
L &A270,@CHOIX%"
2390 PRINT#W%,"     On affiche le menu N
o 0 aux coordonnees 10,14"
2400 PRINT#W%,"           30 !MENU,0,10,1
4"
2410 PRINT#W%,"     Test de la reponse d
ans CHOIX%"
2420 PRINT#W%,"           40 ON CHOIX% GO
TO 50,60,70,80,90"
2430 PRINT#W%,"     Addition"
2440 PRINT#W%,"           50 INPUT A:INPU
T B:PRINT A+B:GOTO 30"
2450 PRINT#W%,"     Soustraction"
2460 PRINT#W%,"           60 INPUT A:INPU
T B:PRINT A-B:GOTO 30"
2470 PRINT#W%,"     Multiplication"
2480 PRINT#W%,"           70 INPUT A:INPU
T B:PRINT A*B:GOTO 30"
2490 PRINT#W%,"     Division"
2500 PRINT#W%,"           80 INPUT A:INPU
T B:PRINT A/B:GOTO 30"
2510 PRINT#W%,"     Quitter (On affiche
le menu No 1 en X=14 et Y=15)"
2520 PRINT#W%,"           90 !MENU,1,14,1
5:IF CHOIX%=2 THEN GOTO 30 ELSE END"
2530 PRINT#W%:PRINT#W%,"Vous etes mainte
nant pret a utiliser MINI-MAC. Bon coura
ge."
2540 IF W%=1 THEN CALL &BB06:GOTO 1170 E
LSE GOTO 1170
2550 '---------------
2560 'Retour au BASIC
2570 '---------------
2580 !MENU,8,14,12:ON C% GOTO 1170,2590
2590 INK 1,15:INK 0,1:BORDER 1:MODE 1:EN
D
2600 LOCATE 15,12:PRINT"X Option impossi
ble, aucun menu n'ayant ete edite. X"
2610 FOR H%=1 TO 4500:NEXT:GOTO 1170
2620 '-----------------------------------
2630 'Masque de saisie et detection des
      erreurs
2640 '-----------------------------------
2650 IF T%(M%)=1 THEN LOCATE 37,3:LINE I
NPUT M$ ELSE GOTO 2690
2660 IF LEN(M$)>40 THEN LOCATE 37,3:PRIN
T STRING$(44,32):GOTO 2620
2670 IF M$="" THEN 2620
2680 M$(M%,0)=M$
2690 FOR J%=1 TO 17
2700 LOCATE 20,J%+4:LINE INPUT M$
2710 IF LEN(M$)>40 THEN LOCATE 20,J%+4:P
RINT ZZ$+"        ":GOTO 2700
2720 IF M$="Q" THEN N%(M%)=J%-1:J%=17:GO
TO 2770
2730 IF M$="" AND M$(M%,J%)=ZZ$ THEN M$(
M%,J%)=""
2740 IF M$="" AND M$(M%,J%)<>ZZ$ THEN M$
=M$(M%,J%)
2750 M$(M%,J%)=M$:LOCATE 64,J%+4:PRINT"L
ongueur";
2760 PRINT STR$(LEN(M$(M%,J%)))
2770 NEXT:RETURN
2780 '-----------------------------------
2790 'Recapitulatif pour chaque menu,
      demande du mode ecran
2800 '-----------------------------------
2810 FOR J%=0 TO 17:IF M$(M%,J%)=ZZ$ THE
N 2840
2820 IF (T%(M%)=1 AND J%=0) THEN !MENU,7
,54,20:IF C%=1 THEN CT%=1 ELSE CT%=0
2830 IF LEN(M$(M%,J%))>=LAR%(M%) THEN LA
R%(M%)=LEN(M$(M%,J%))
2840 NEXT
2850 IF CT%=1 THEN IF LEN(M$(M%,0))<LAR%
(M%) THEN M$(M%,0)=STRING$((LAR%(M%)-LEN
(M$(M%,0)))/2,32)+M$(M%,0)
2860 LOCATE 19,24:PRINT"Largeur du menu"
STR$(LAR%(M%)+2)" colonnes,";
2870 PRINT" hauteur"STR$(N%(M%)+2+T%(M%)
)" lignes."
2880 LOCATE 29,25
2890 PRINT "Surface de"STR$((LAR%(M%)+2)
*(2+N%(M%)+T%(M%)));
2900 PRINT" caracteres.":GOSUB 3330:FOR
H%=1 TO 5000:NEXT:!MENU,4,56,18
2910 IF C%=1 THEN MODEC%=1
2920 IF C%=2 THEN MODEC%=2
2930 IF C%=3 THEN MODEC%=4
2940 BUF%=(LAR%(M%)+4)*(2+N%(M%)+T%(M%))
*8*MODEC%
2950 IF BUF%>=BUFFER% THEN BUFFER%=BUF%
2960 FOR H%=23 TO 25:LOCATE 1,H%:PRINT S
TRING$(78,32):NEXT
2970 LOCATE 14,24:PRINT"En mode"STR$(3-C
%)" ce menu necessite un buffer";
2980 PRINT " de"STR$(BUF%)" octets."
2990 RETURN
3000 '-----------------------------------
3010 'Option de saisie des caracteristi-
      ques des menus deroulants
3020 '-----------------------------------
3030 FOR M%=0 TO 9:GOSUB 3080:IF UPPER$(
A$)<>"F" THEN GOSUB 2620:GOSUB 2780:ELSE
 M%=9:GOTO 3070
3040 LOCATE 28,22:PRINT"X Etes vous d'ac
cord (O/N) X"
3050 A$="":WHILE A$<>"O" AND A$<>"N":A$=
UPPER$(INKEY$):WEND
3060 IF A$="N" THEN M%=M%-1
3070 NEXT:RETURN
3080 '-----------------------------------
3090 'Affiche le contenu des menus
      deroulants (pour l'edition et les
      modifs)
3100 '-----------------------------------
3110 MODE 2:INK 0,15:INK 1,0:LOCATE 9,1:
PRINT"MINI-MAC X Editeur X";
3120 PRINT" MINI-MAC          Edition du
 menu numero X"STR$(M%)" X"
3130 MOVE 60,380:DRAWR 511,0
3140 LOCATE 4,3:PRINT K1$;:T%(M%)=0
3150 PRINT"          (Choisir=ESPACE, vali
der=ENTER et finir=F)"
3160 A$="":WHILE A$<>" " AND UPPER$(A$)<
>"F" AND A$<>CHR$(13):A$=INKEY$:WEND
3170 IF A$=" " AND T%(M%) THEN LOCATE 4,
3:PRINT K1$:T%(M%)=0:GOTO 3190
3180 IF A$=" " AND NOT T%(M%) THEN LOCAT
E 4,3:PRINT K2$:T%(M%)=1
3190 IF UPPER$(A$)="F" THEN 3260
3200 IF A$=CHR$(13) THEN 3210 ELSE GOTO
3160
3210 GOSUB 3270:FOR J%=1 TO 17:LOCATE 6,
J%+4:PRINT"Option No"STR$(J%):NEXT
3220 LOCATE 34,22:PRINT"X Q pour finir X
"
3230 FOR J%=1 TO 17:LOCATE 20,J%+4:PRINT
 M$(M%,J%)+STRING$(40-LEN(M$(M%,J%)),46)
:NEXT
3240 IF T%(M%)=1 THEN LOCATE 31,3:PRINT
"Titre "M$(M%,0)+STRING$(40-LEN(M$(M%,0)
),46)
3250 IF T%(M%)=0 THEN LOCATE 31,3:PRINT
STRING$(50,32)
3260 RETURN
3270 '-------------
3280 'Trace du cadre
3290 '-------------
3300 LOCATE 3,4:PRINT CHR$(150)+STRING$(
73,154)+CHR$(156)
3310 FOR I%=0 TO 17:LOCATE 3,I%+5:PRINT
CHR$(149)
3320 LOCATE 77,I%+5:PRINT CHR$(149):NEXT
3330 LOCATE 3,22:PRINT CHR$(147)+STRING$
(73,154)+CHR$(153)
3340 RETURN
3350 '-----------------------------------
3360 'Implantation du code objet
      (1024 octets) Bon courage !!!
3370 '-----------------------------------
3380 AD%=&A270:RESTORE 3460
3390 CHECKSUM%=0:J%=J%+1
3400 FOR I%=0 TO 15:READ A$:POKE AD%,VAL
("&"+A$):AD%=AD%+1
3410 CHECKSUM%=CHECKSUM%+VAL("&"+A$)
```

```
3420 NEXT
3430 READ SOMME%
3440 IF SOMME%<>CHECKSUM% THEN PRINT"Il y a une erreur dans les datas.":PRINT"Verifiez la ligne No"STR$(((J%-1)*10)+3460):END
3450 IF SOMME%=1145 THEN RETURN ELSE GOTO 3390
3460 DATA DD,56,01,DD,5E,00,ED,53,2E,A6,01,83,A2,21,8D,A2,1785
3470 DATA C3,D1,BC,88,A2,C3,91,A2,4D,45,4E,D5,00,00,00,00,1829
3480 DATA 00,FE,03,C0,DD,7E,00,32,1C,A6,DD,7E,02,32,1A,A6,1631
3490 DATA DD,7E,04,32,30,A6,87,26,00,6F,11,54,A6,19,22,B3,1404
3500 DATA A2,DD,2A,34,12,DD,7E,00,32,28,A6,DD,7E,02,32,2A,1539
3510 DATA A6,CD,3C,A3,CD,20,A5,CD,6E,A5,CD,2A,A4,CD,AD,A4,2429
3520 DATA CD,F0,A4,CD,9D,A5,CD,4D,A5,CD,12,A6,C9,EB,29,29,2490
3530 DATA 29,EB,C9,E5,CD,11,BC,EB,30,02,29,29,20,01,29,EB,1792
3540 DATA E1,C9,7A,2F,57,7B,2F,5F,13,C9,CB,2D,CB,BD,CB,2C,2054
3550 DATA D0,CB,FD,C9,06,08,C5,ED,5B,28,A6,CD,E3,A2,43,2A,2313
3560 DATA 26,A6,7E,EE,FF,77,23,22,26,A6,10,F3,C1,ED,5B,28,2035
3570 DATA A6,CD,E3,A2,2A,26,A6,ED,52,22,26,A6,11,00,08,19,1613
3580 DATA 22,26,A6,10,D1,2A,24,A6,22,26,A6,C9,ED,5B,1A,A6,1666
3590 DATA 1B,CD,DD,A2,CD,E3,A2,ED,53,36,A6,ED,5B,1C,A6,CD,2476
3600 DATA DD,A2,EB,29,EB,21,9F,01,ED,52,EB,ED,53,3A,A6,ED,2422
3610 DATA 5B,28,A6,13,13,CD,DD,A2,1B,CD,E3,A2,2A,36,A6,19,1831
3620 DATA 22,38,A6,ED,5B,2A,A6,13,13,DD,7E,01,B7,28,01,13,1421
3630 DATA CD,DD,A2,EB,29,EB,CD,F2,A2,2A,3A,A6,19,23,22,3C,2128
3640 DATA A6,11,03,00,CD,E3,A2,2A,36,A6,19,22,3E,A6,11,03,1349
3650 DATA 00,CD,E3,A2,2A,38,A6,ED,52,22,40,A6,11,08,00,CD,1671
3660 DATA E3,A2,2A,36,A6,19,22,42,A6,11,08,00,CD,E3,A2,2A,1603
3670 DATA 38,A6,ED,52,22,44,A6,2A,3A,A6,DD,7E,01,B7,28,04,1650
3680 DATA 06,14,18,02,06,04,2B,10,FD,22,46,A6,2A,3C,A6,23,0947
3690 DATA 23,23,23,23,22,48,A6,2A,3A,A6,CD,FA,A2,22,4E,A6,1573
3700 DATA ED,5B,2A,A6,13,13,DD,7E,01,B7,28,01,13,CD,DD,A2,1753
3710 DATA ED,53,4A,A6,2A,3A,A6,DD,7E,01,B7,28,04,06,20,18,1463
3720 DATA 02,06,10,2B,10,FD,CD,FA,A2,22,22,A6,ED,5B,28,A6,1721
3730 DATA 13,13,CD,E3,A2,ED,53,4C,A6,C9,ED,5B,36,A6,2A,3A,2043
3740 DATA A6,CD,EA,BB,ED,5B,38,A6,2A,3A,A6,CD,F6,BB,ED,5B,2574
3750 DATA 38,A6,2A,3C,A6,CD,F6,BB,ED,5B,36,A6,2A,3C,A6,CD,2149
3760 DATA F6,BB,ED,5B,36,A6,2A,3A,A6,CD,F6,BB,ED,5B,42,A6,2445
3770 DATA 2A,46,A6,CD,EA,BB,ED,5B,3E,A6,2A,46,A6,CD,F6,BB,2376
3780 DATA ED,5B,3E,A6,2A,48,A6,CD,F6,BB,ED,5B,42,A6,2A,48,2148
3790 DATA A6,CD,F6,BB,ED,5B,44,A6,2A,46,A6,CD,EA,BB,ED,5B,2598
3800 DATA 40,A6,2A,46,A6,CD,F6,BB,ED,5B,40,A6,2A,48,A6,CD,2189
3810 DATA F6,BB,ED,5B,44,A6,2A,48,A6,CD,F6,BB,C9,ED,5B,1A,2468
3820 DATA A6,13,ED,53,1E,A6,ED,5B,1C,A6,13,ED,53,20,A6,DD,1981
3830 DATA 7E,01,B7,28,2A,13,ED,53,20,A6,11,08,00,CD,E3,A2,1548
3840 DATA 2A,36,A6,19,EB,2A,3A,A6,2B,2B,2B,2B,2B,CD,C0,BB,1587
3850 DATA DD,23,DD,7E,02,B7,28,07,CD,FC,BB,DD,23,18,F3,C9,2203
3860 DATA 3A,1E,A6,67,3A,20,A6,6F,CD,75,BB,DD,7E,03,B7,28,1806
3870 DATA 07,CD,5A,BB,DD,23,18,F3,DD,23,DD,7E,03,FE,FF,28,2167
3880 DATA 0E,3A,20,A6,3C,32,20,A6,6F,3A,1E,A6,67,18,D9,C9,1488
3890 DATA ED,5B,1A,A6,1B,CD,DD,A2,2A,4E,A6,CD,1D,BC,22,50,1957
3900 DATA A6,ED,5B,52,A6,3A,4A,A6,47,C5,E5,3A,4C,A6,3C,3C,1957
3910 DATA 4F,06,00,ED,B0,E1,CD,26,BC,C1,10,ED,C9,ED,5B,50,2209
3920 DATA A6,2A,52,A6,3A,4A,A6,47,C5,D5,3A,4C,A6,3C,3C,4F,1734
3930 DATA 06,00,ED,B0,EB,E1,CD,26,BC,EB,C1,10,EB,C9,3A,28,2288
3940 DATA A6,47,3A,1A,A6,80,32,32,A6,3A,2A,A6,47,47,3A,1C,1375
3950 DATA A6,80,5F,DD,7E,01,B7,28,01,1C,3A,32,A6,57,3A,1A,1434
3960 DATA A6,67,25,3A,1C,A6,6F,2D,97,CD,44,BC,C9,ED,5B,1A,1881
3970 DATA A6,CD,DD,A2,2A,22,A6,CD,1D,BC,22,24,A6,22,26,A6,1892
3980 DATA CD,04,A3,3E,01,32,2C,A6,CD,09,B8,30,FB,FE,0D,C8,1862
3990 DATA FE,F0,CC,F0,A5,FE,F1,CC,CC,A5,18,EC,3A,2C,A6,47,2770
4000 DATA 3A,2A,A6,B8,C8,CD,04,A3,2A,26,A6,11,50,00,19,22,1424
4010 DATA 26,A6,22,24,A6,2A,2C,A6,23,22,2C,A6,CD,04,A3,C9,1544
4020 DATA 3A,2C,A6,FE,01,C8,CD,04,A3,2A,26,A6,11,4F,00,ED,1674
4030 DATA 52,22,26,A6,22,24,A6,2A,2C,A6,2B,22,2C,A6,CD,04,1304
4040 DATA A3,C9,3A,2C,A6,2A,2E,A6,77,C9,00,00,00,00,00,00,1206
4050 DATA 00,00,00,00,00,00,00,00,00,00,00,00,01,00,00,00,0001
4060 DATA 00,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00,0000
4070 DATA 00,00,00,00,00,00,00,00,00,00,00,00,00,00,00,00,0000
4080 DATA 00,00,B7,96,00,90,41,90,65,90,AA,90,C6,90,13,91,1751
4090 DATA 5E,91,7C,91,9E,91,BD,91,00,00,00,00,00,00,00,00,1145
4100 '-----------------------------------
4110 'Implantation du texte des adresses
     &9000 a &96B6 (1718 caracteres)
4120 '-----------------------------------
4130 AD%=&9000:RESTORE 4230
4140 READ LAR%:IF LAR%=0 THEN RETURN
4150 READ T%,N%:POKE AD%,LAR%:POKE AD%+1,T%
4160 POKE AD%+2,N%:AD%=AD%+3
4170 READ M$
4180 IF M$="FIN" THEN POKE AD%,&FF:AD%=AD%+1:GOTO 4140
4190 FOR I%=1 TO LEN(M$)
4200 A%=ASC(MID$(M$,I%,1)):POKE AD%,A%:AD%=AD%+1
4210 NEXT I%
4220 POKE AD%,0:AD%=AD%+1:GOTO 4170
4230 DATA 14,01,04,MENU PRINCIPAL,Editeur,Sauvegarde
4240 DATA Mode d'emploi,Retour basic,FIN
4250 DATA 15,00,02,Sans imprimante,Avec imprimante,FIN
4260 DATA 14,01,05,CALCULETTE,addition,soustraction
4270 DATA multiplication,division,quitter,FIN
4280 DATA 12,00,02,confirmation,annulation,FIN
4290 DATA 18,01,03,MODE d'utilisation," MODE 2 (640*200)"
4300 DATA " MODE 1 (320*200)"," MODE 0 (160*200)",FIN
4310 DATA 26,1,2,"       * DISQUETTE. *"," Effectuer une sauvegarde"
4320 DATA "   Catalogue du drive A",FIN
4330 DATA 13,00,2," Retour menu"," Sauvegarder",FIN
4340 DATA 16,00,2," Centrage titre "," Retour menu",FIN
4350 DATA 14,00,2," Retour menu"," Retour Basic",FIN,0
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